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ECONOMIC IMPACT OF THE GROWTH OF TENTH AVENUE SOUTH UPON THE ECONOMY OF GREAT FALLS, MONTANA: 1940-1964

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GREAT FALLS, MONTANA

for the
MONTANA STATE HIGHWAY COMMISSION
in cooperation with
U. S. DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

1965

ACKNOWLEDGMENT

Grateful acknowledgment is extended to the staff of the Planning Survey Division of the Montana State Highway Commission for data and guidance during the course of our research. Also, we are indebted to all the business establishments in the area of Tenth Avenue South for their wholehearted cooperation in answering questions on our Survey Analysis Sheet.

Appreciation is likewise extended to the staffs in the offices of the Building Inspector, Engineering Department, Water Department and City Clerk of the City of Great Falls. The staffs in the Cascade County Assessor's office, Reclassification office and Treasurer's office were helpful in furnishing public record data and an explanation of their contents. Because of the cooperation of the staffs in all of the above offices it has been possible to develop many additional details in the chapters of this report.

Advice and counsel has also been received from the Great Falls Chamber of Commerce and the City-County Planning Board. Appreciation for statistical data is also extended to the Montana Power Company, Great Falls Gas Company and Mountain States Telephone and Telegraph Company as well as the Federal Reserve Bank of Minneapolis and the Federal Aviation Agency, Washington, D.C.

Through the courtesy of the National Map Corporation, Oceanside, California, permission was received to reproduce a map of the City of Great Falls. Similarly, two photos were used through the courtesy of the Great Falls Tribune and De Mier Studio.

Preface

The purpose of this study was to determine the economic impact of the growth and development of Tenth Avenue South upon the economy of the City of Great Falls, Montana, for the twenty-five years from 1940 to 1964. In conjunction with this main objective, certain highway improvements were noted and the effect of these improvements upon Tenth Avenue's business development was considered. During the course of the study, the City-County planning Board started a land use and economic development study as part of a cooperative urban transportation planning process, and the decision was made to utilize as much as possible of the data from the Tenth Avenue South Study for inclusion in the Planning Board project, thereby eliminating duplication of effort and promoting economy in the two separate projects.

This report has been so organized that a review of Chapter I- INTRODUCTION and Chapter II- REPORT SUMMARY will give the reader many of the key findings of the entire report. Subsequent chapters, III through IX, develop the findings in greater detail, and chapters X and XI give the background essential to an understanding of the economy of Great Falls and Tenth Avenue South.

To gain this knowledge of economic impact of Tenth Avenue South, the study was focused on the growth changes of a variety of factors, such as: number and type of business establishments, year of location of each business, traffic volumes, number and valuation of building permits, assessed valuation of land and improvements, contemporary employment volume, and aspects of present day land and building utilization. Growth changes relative to each of these methods has been treated extensively in the report. Depending upon the statistical series, whenever possible comparisons of changes in Tenth Avenue South and the City are shown.

In the course of development of material for the report, supplementary data of an important nature, but secondary to the objectives, had to be investigated. Judgment was used regarding the inclusion of such information and data in the report. Thus, in addition to developing statistical measurements of growth changes for Tenth Avenue South, on a broader basis selected indicators of economic growth of the over-all City of Great Falls are presented (Chapter XI). Likewise, pertinent historical information of the City of Great Falls has been made a part of the report (Chapter X and Appendix 6).

The formal request for the research grant to carry out this economic impact study stated that the objectives were:

1. To measure the growth of Tenth Avenue South by analysis of:
    a. Building permits
    b. Assessed valuation of property
    c. Employment
2. Comparison of the growth of Tenth Avenue South with the City of Great Falls by means of assessed valuation of property, and number and valuation of building permits.
3. Determine whether Tenth Avenue South development resulted in the establishment of new businesses in the economy of Great Falls or in the shift of old, established businesses to new locations in Great Falls.
4. Comparison of growth of commercial development in the vicinity of the thoroughfare with the growth in traffic as revealed by highway improvements and traffic counts taken over a period of several years.

Prior to the obtaining of specific statistical data for the study, it was necessary to formulate a definition of the project's physical area in terms of blocks and lots. This definition, formally referred to as the Tenth Avenue Business Complex embraces not only the property on the north and south sides of Tenth Avenue, but also includes in some areas adjacent property that has been fully or partly commercially developed. During the planning and analysis stages of the report's development, detail maps of the blocks and lots were used to identify the physical areas of the Complex. These maps were obtained from the offices of the City-County Planning Board and the Engineering Department, City of Great Falls. As a result of this preliminary work a map of the entire Tenth Avenue Business Complex was formulated and is a part of Chapter I.

In the development of this report extensive use was made of (a) public or government records and (b) personal interviews in which a questionnaire was utilized to obtain uniform and tabulatable data.

Public or government records were utilized to obtain data for selected years during the period of 1940 to 1964. Data on the assessed valuation of land and improvements were obtained from the public records in the office of the County Assessor, Cascade County. Data on the number and valuation of building permits for the survey period were secured from the records in the office of the Building Inspector, City of Great Falls.

Six hundred and eighty-two (682) Survey Analysis Sheets were completed, and 269 contained information obtained from personal interviews of business establishments in the area of Tenth Avenue South. Where necessary each analysis sheet or questionnaire furnished the following kinds of information---

Type of business
Square feet of land, floor space, parking area, etc.
Type of legal ownership of business
Year of location of business
Year of expansion
Location Advantages
Extent of relocation of business
Employment for year 1964
  a. Full-time and Part-time
  b. Type of employee

The Survey Analysis Sheets also obtained detailed data pertinent to certain selected kinds of business---

Restaurants
Motels
Auto Service Stations
New and Used Car Operations
Professional Services
Multiple Dwellings (Apartments)
Mobile Homes---Sales
Mobile Homes---Trailer Courts
Personal Services and Self-Service Laundries

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I. INTRODUCTION

A. Tenth Avenue South in the City of Great Falls

Parallel with the growth of population in the United States over the decades has been the population growth of Montana. The City of Great Falls, which is the largest city in the state, has experienced a population increase, since its founding in 1884, which surpasses that of the state.

Map No. 1, Vicinity Map of City of Great Falls, visually locates the city in the state of Montana and also shows highways, towns and counties within 50 miles of the city.

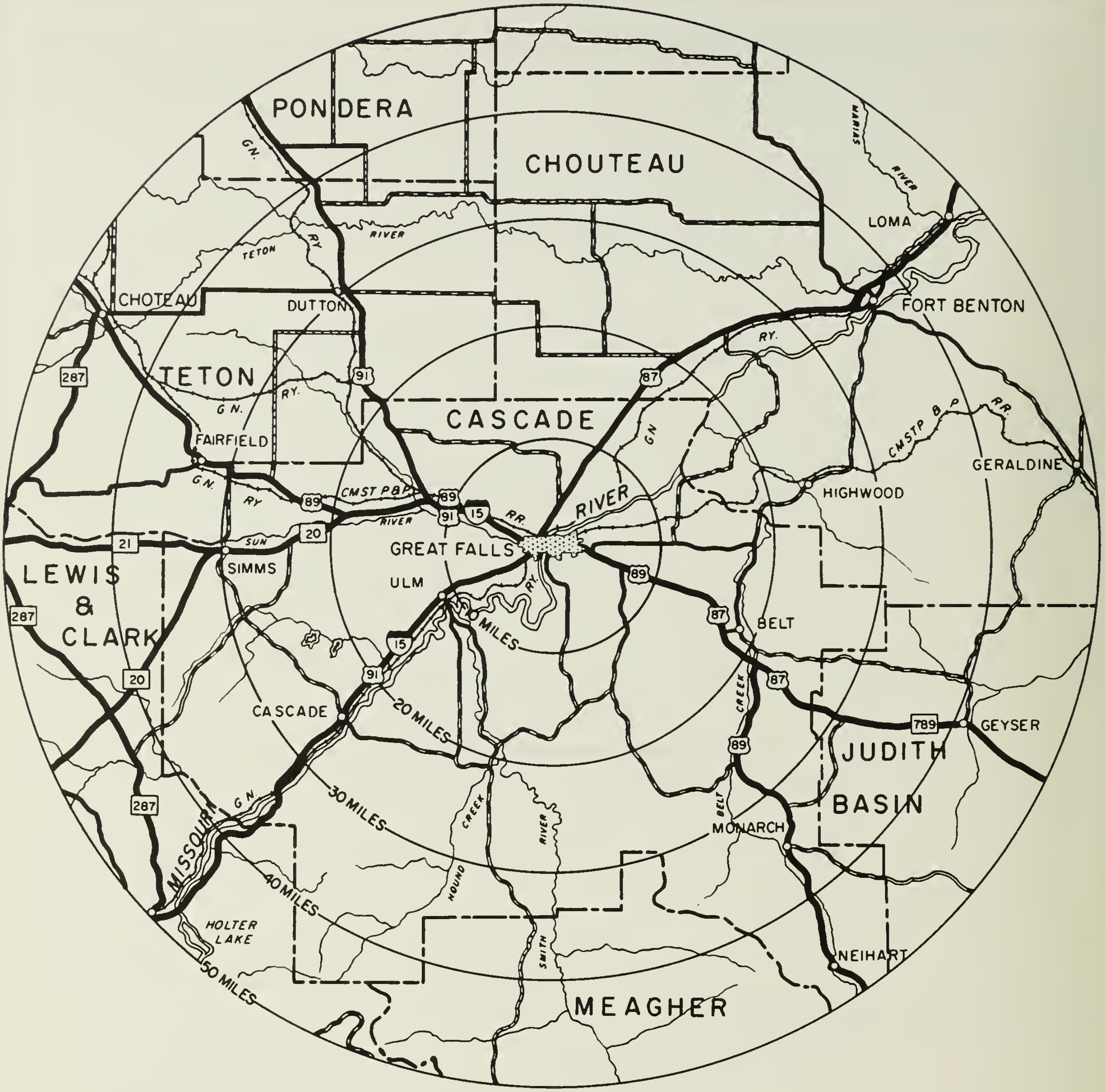
Although the business development within the City of Great Falls has appeared in several locations with the passage of time and the expansion of population, the central business district of downtown Great Falls was for many decades the only core or center of business activity in the city. However, in the last two decades as the growing population has pushed the residential districts further and further away from the downtown central business district, Great Falls has witnessed the growth and development of new business areas like nearly all cities in the nation.

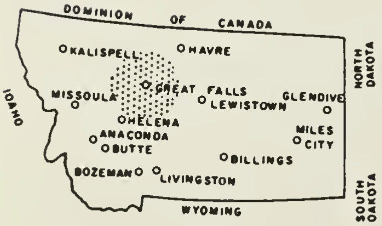
Map No. 2, City of Great Falls, is a current block map of the city with its expanding residential and business areas.

In Great Falls, the most noticeable new business development has been in the area of Tenth Avenue South which is in the center, lower half of Map No. 2. The purpose of this study is to provide information relative to certain highway improvements that assisted in the growth and influence of this geographical area of the city.

Tenth Avenue South prior to 1933 was designated only as one of the many streets of Great Falls. On October 13, 1933, it was officially approved as part of the state highway system. Located in the southern part of the city, ten (10) city blocks away from the central or main business street, it receives the main body of east-west through-traffic. It is approximately 4.1 miles in length, stretching from the Warden Bridge over the Missouri River at the west end to the 57th Street By-pass or traffic cut-off at the east end. At present, it officially carries the U. S. highway numbers By-pass 87 and 89, and Montana highway numbers 20 and 789.

In 1951, the O. S. Warden Bridge across the Missouri River was completed and opened. Prior to 1951, the main body of east-west through-traffic had to be routed through the business area of downtown Great Falls in order to cross the Missouri River at the First Avenue North bridge. For traffic





DIAGRAMMATIC MAP

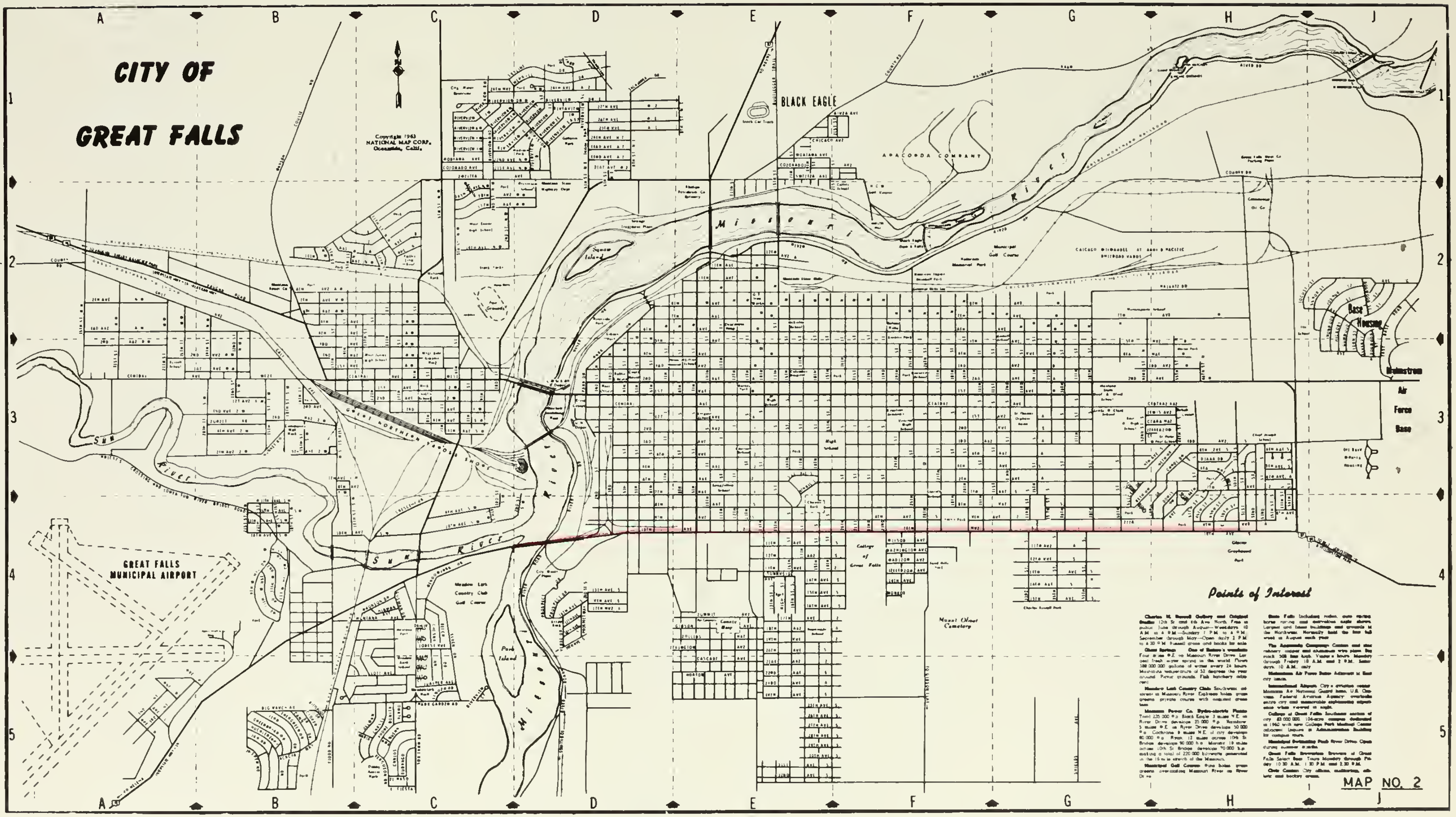
OF

MONTANA

CITY OF GREAT FALLS
VICINITY MAP

SOURCE: STATE HIGHWAY COMMISSION OF MONTANA

MAP NO. 1


CITY OF
GREAT FALLS
Copyright 1963
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Oceanside, Calif.
BLACK EAGLE
ANACONDA COMPANY
Missouri River
Sun River
Squaw Island
Park Island
GREAT FALLS
MUNICIPAL AIRPORT
Great Northern
Meadow Lark Country Club Golf Course
College of Great Falls
Mount Olivet Cemetery
Malmstrom Air Force Base
Base Housing
Points of Interest
MAP NO. 2
A
B
C
D
E
F
G
H
J
1
2
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5

coming from the east this meant, for most vehicles, turning north on 57th Street to 2nd Avenue North; then proceeding westward to Park Drive; and then left to the bridge. Once on the west side of the river, traffic moved west on Central Avenue West, and then usually south on 6th Street, SW until it crossed the Sun River and connected with Highway 91 to Helena.

With the opening of the bridge, it was now possible for through-traffic to move from the eastern entrance of the city to the Great Falls International Airport by traveling in a direct straight line along the length of Tenth Avenue South. When opened for the full year of 1952, the State Highway Department estimates that the Warden Bridge carried an average daily traffic volume of 4090 vehicles as compared with 11,790 vehicles in 1964, an increase of 188% for the twelve year period.

Each year witnessed an increase in the vehicle traffic volume along the entire length of the Avenue. To handle the increased traffic volume, the State Highway Department in 1956 completed a four-lane highway of 80 feet in width with a minimum right-of-way of 100 feet. The center of the highway is marked by an island or median which not only serves to separate the east-west traffic flow but also facilitates the exit of left-bound vehicles with exit parking lanes. This facility was one of the first in Montana to be designed and constructed with a center median and left-turn bays.

The latest improvement on Tenth Avenue South was the installation in 1964 of a new system of traffic signals by the State Highway Department. At present the 2 miles of the western end of Tenth Avenue South has 9 sets of traffic signals, starting at 3rd Street and ending at 26th Street. The traffic signals are located at the corners of the following streets along Tenth Avenue--

3rd Street
5th Street

7th Street
9th Street

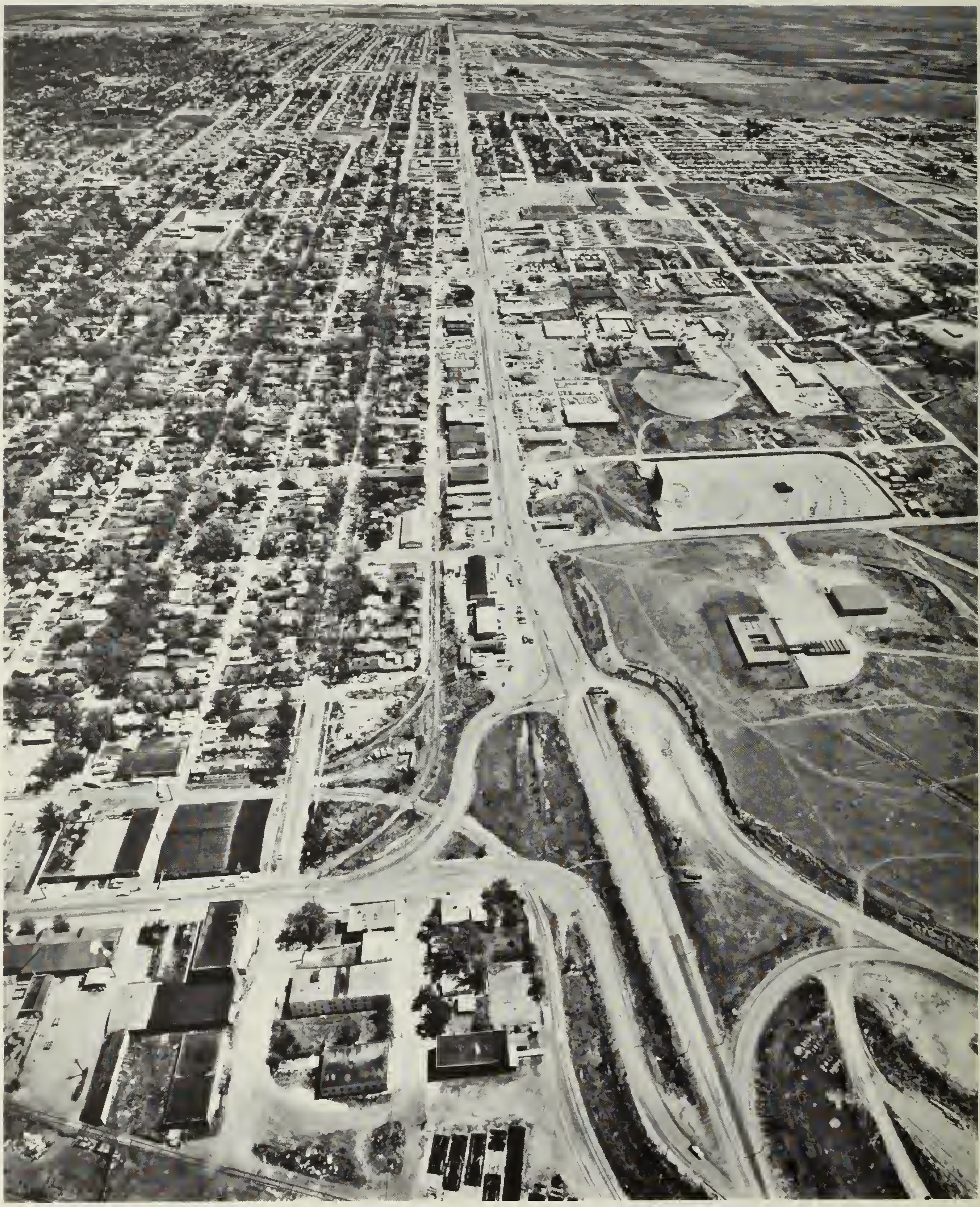
11th Street
13th Street

14th Street
15th Street

25th Street

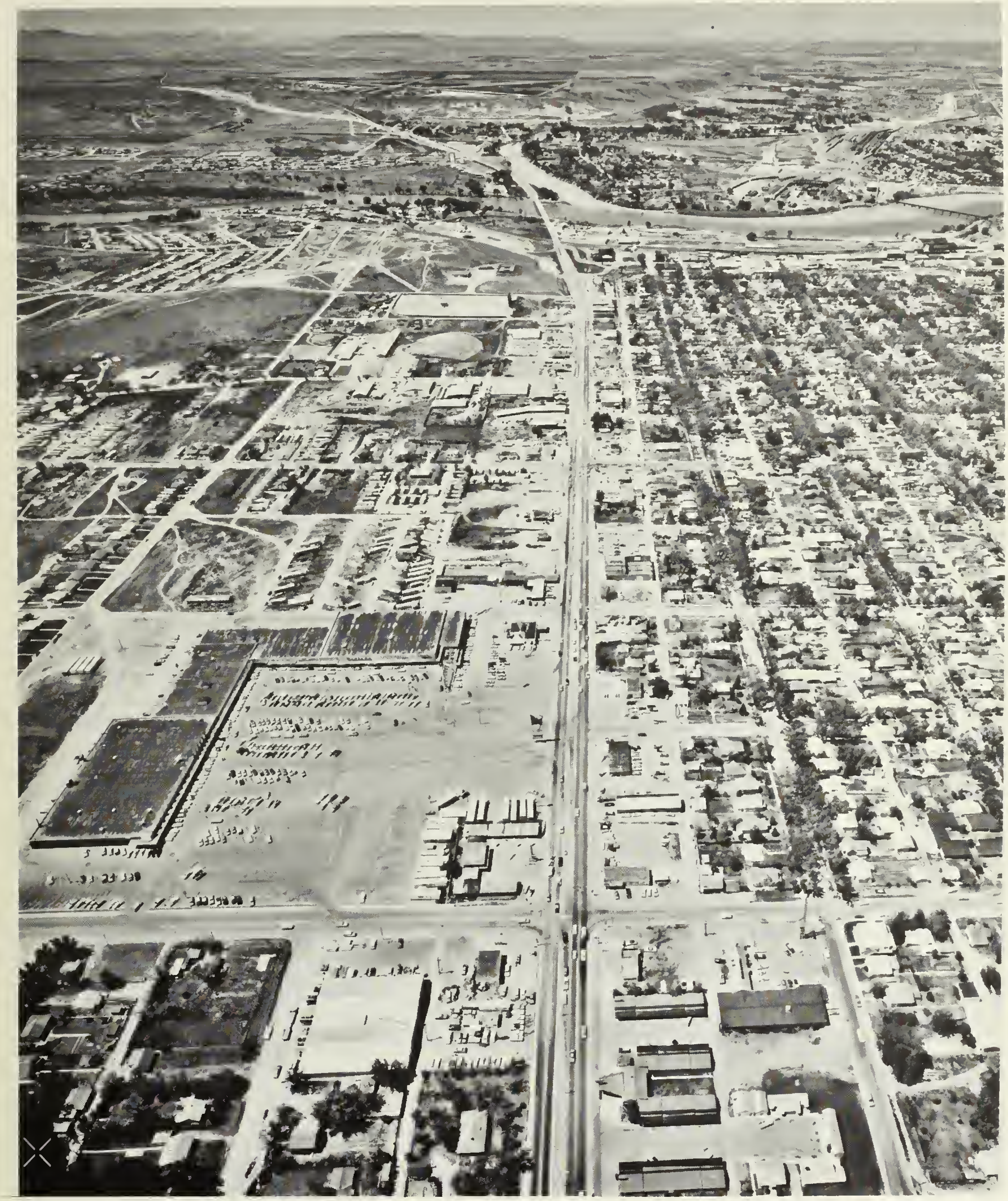
Concomitant with the traffic signal improvement was the installation of curbing along the Avenue from 3rd Street to the vicinity of 38th Street by the State Highway Department. It is primarily in this section of Tenth Avenue that the business development has occurred.

AERIAL VIEW LOOKING EAST



1. Current aerial view of Tenth Avenue South, looking east from above the O.S. Warden Bridge across the Missouri.

AERIAL VIEW LOOKING WEST



2. Current aerial view of Tenth Avenue South, looking west from above 14th Street toward the Missouri River and Sun River. Holiday Village Shopping Center, lower left, with its large parking area.

B. Concept and Characteristics of Complex and Its Areas

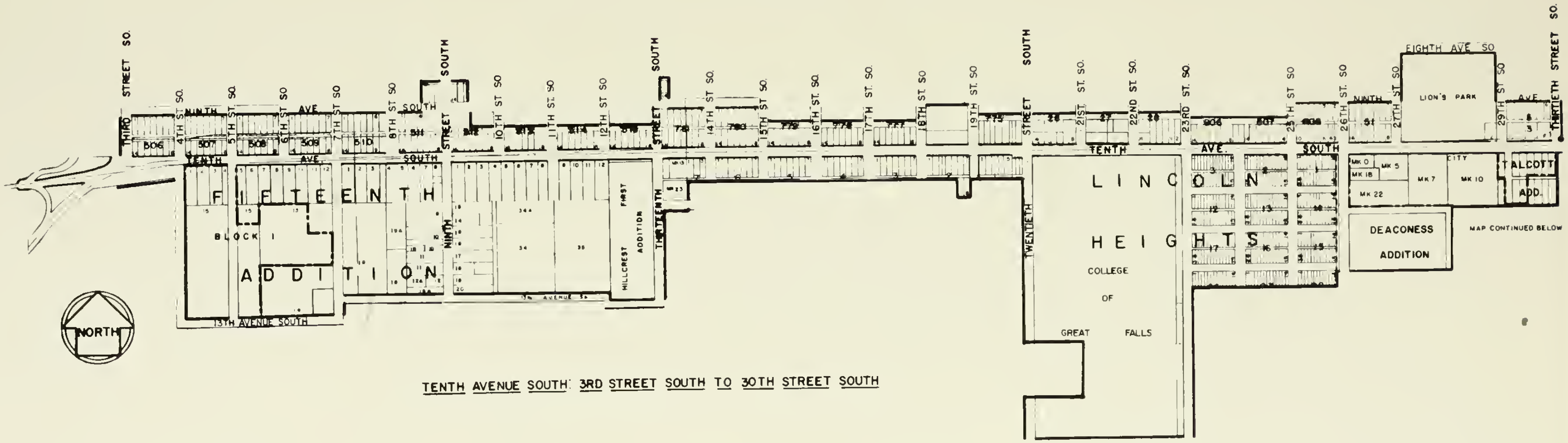
1. Description: As used in this report, the concept of the Tenth Avenue Business Complex embraces not only the property on the north and south sides of Tenth Avenue but also pieces of property adjacent to it. Map No. 3, "Tenth Avenue Business Complex" shows the physical dimensions of our concept of the Complex wherein specific platted blocks, parts of platted blocks and vacant platted and unplatted land are put together to represent the entire physical area. This map was developed from sections of several maps furnished by the office of the City-County Planning Board. As a supplement, maps in the office of the City Engineer, City of Great Falls, were also reviewed.

The Complex has a total land area of 30,831,497 square feet (or 1.11 square miles), and consists of 24,147,317 sq. ft. of platted and unplatted land and 6,684,180 sq. ft. of rights-of way for avenues, streets, and alleys. With the area (land and water) of the City of Great Falls in 1964 being 14.34 square miles, then the Complex represents an area comparable to 7.7 percent of the city's total area.

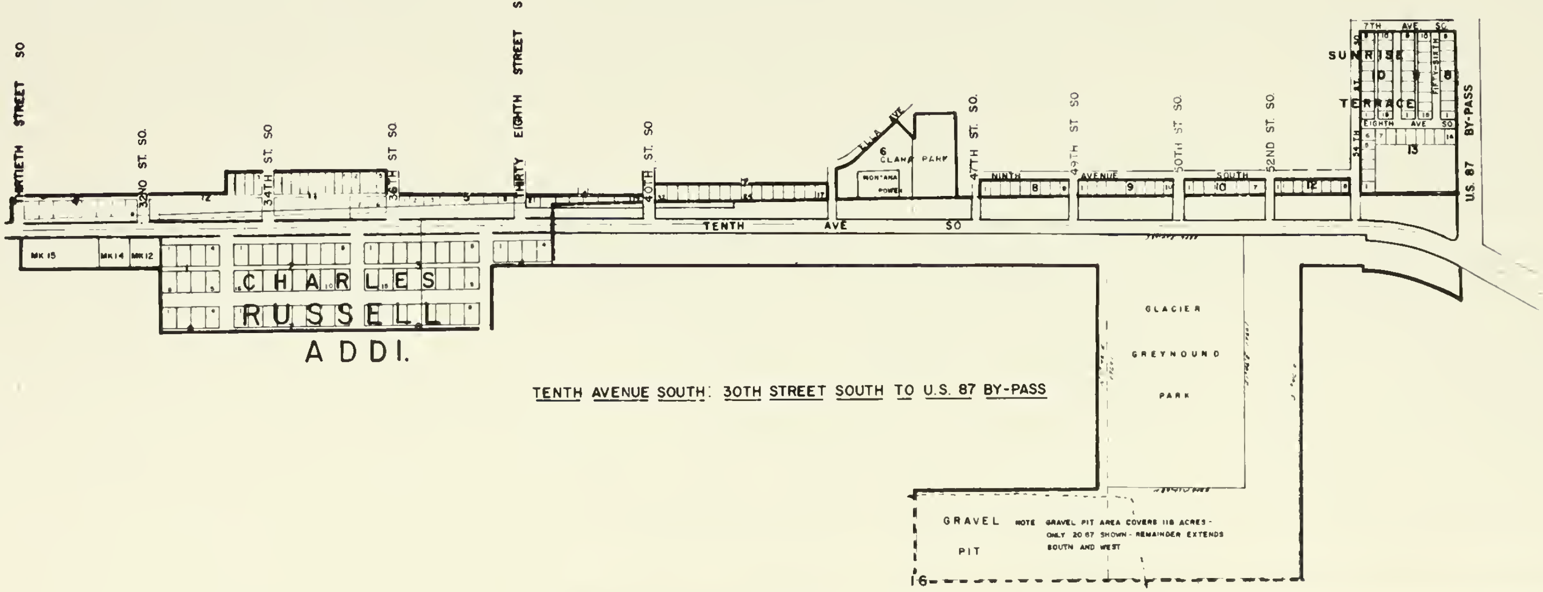
Webster's Collegiate International Dictionary defines a complex as "a whole made up of complicated and interrelated parts." A consideration of the physical structure of the twelve (12) areas into which the Complex has been divided as well as a look at the land use of the types of businesses that have established themselves in the area will give us a picture of the Complex as being composed of complicated and inter-related parts.

2. Areas: The physical structure of the Complex has been divided into twelve (12) areas for analytical purposes since growth and development have not been uniform throughout the Complex. Map No. 4, "Twelve Areas of the Complex" shows the physical size and location of each area. Tenth Avenue itself is the dividing line for classifying areas as either north side or south side. Next, the Complex is divided east and west by 9th, 13th, 20th, 30th, and 38th streets. Since the Complex begins at 3rd Street and terminates at 57th Street or U. S. 87 By-Pass, we arrive at twelve (12) areas; for example, Area #1 is from 3rd to 9th Street on the north side of Tenth Avenue and Area #2 is from 4th to 9th Street on the south side of Tenth Avenue, etc. This pattern of area presentation continues easterly with the area boundary streets marked on Map No. 4. The odd number Areas (1, 3, 5, 7, 9, and 11) are on the north side of Tenth Avenue and the even number areas (2, 4, 6, 8, 10 and 12) are on

TENTH AVENUE BUSINESS COMPLEX



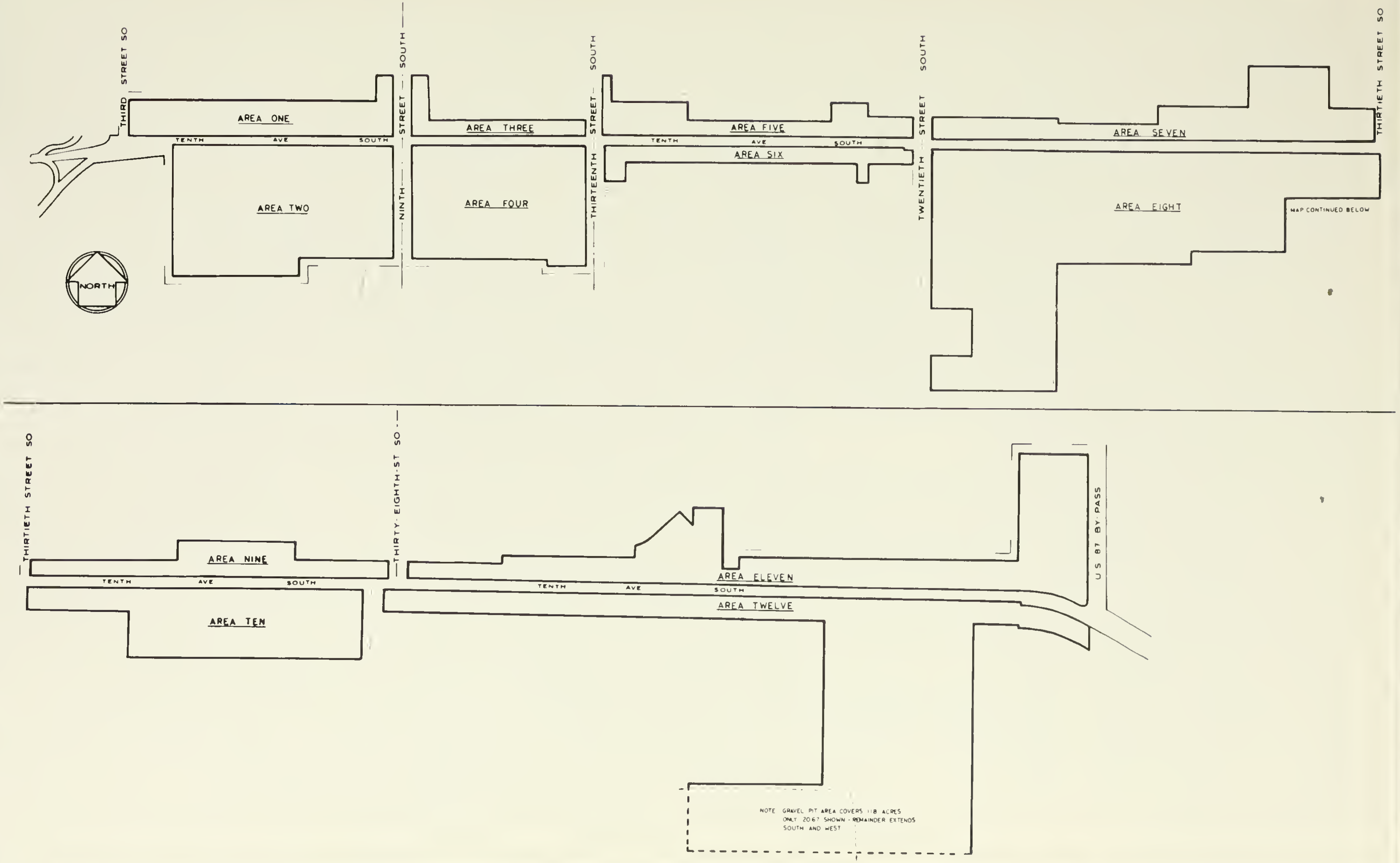
TENTH AVENUE SOUTH: 3RD STREET SOUTH TO 30TH STREET SOUTH



TENTH AVENUE SOUTH: 30TH STREET SOUTH TO U.S. 87 BY-PASS

MAP NO. 3

TWELVE AREAS OF THE COMPLEX



NOTE GRAVEL PIT AREA COVERS 118 ACRES
ONLY 20.67 SHOWN - REMAINDER EXTENDS
SOUTH AND WEST

MAP NO. 4

the south side of Tenth Avenue. For expositional reasons, the Complex may also be viewed as having a western half from 3rd to 30th Street and an eastern half from 30th to 57th Street.

3. Length of Areas Within the Complex: The total mileage length of the Complex is approximately 4.1 miles, or 21,500 feet, from its western extremity (3rd St.) to its eastern terminal point (57th St. or U.S. 87 By-Pass). Areas facing each other will have the same length, except for Areas #1 and 2 where Area #2 begins at 4th Street. The following summary presents the length of areas within the Complex.

Length of Areas Within the Complex

Area	Location	Feet	Miles
1 and 2	3rd St. to 9th St.	2,580	0.5
3 and 4	9th St. to 13th St.	1,720	0.3
5 and 6	13th St. to 20th St.	3,010	0.6
7 and 8	20th St. to 30th St.	4,300	0.8
9 and 10	30th St. to 38th St.	3,440	0.7
11 and 12	38th St. to 57th St.	6,450	1.2
Total		21,500	4.1

4. Land Use By Activities: Another way to look at the complicated and interrelated parts of the Complex is to view the platted and unplatted square feet of land use by the types of activities established in the twelve areas. Appendix 4 presents the Bureau of Public Road's Land Use Activities Code used in this study for the classification of land in the Complex. Also, the appendix explains by detail classification each of the major types of land use activities of a business and non-business nature. Chapter VIII analyzes in some detail the various types of land use activities found in the Complex.

The following summary shows the utilization of the 24,147,317 square feet of platted and unplatted land in the Complex by the Bureau of Public Road's classification of land use activities.

Total Land Allocation By Land Use Activities

Land Use Activities		Square Feet	Percent
I.	Residential	2,740,986	11.4
II.	Manufacturing Industries	288,367	1.2
III.	Non-Manufacturing Industries	5,236,381	21.7
IV.	Commercial	2,868,029	12.0
V.	Wholesale and Storage	78,122	0.3
VI.	Services	713,631	3.2
VII.	Public and Quasi-Public Bldgs	5,349,339	22.2
VIII.	Public and Quasi-Public Open Space	2,586,784	10.7
IX.	Other Open Space	4,285,678	17.3
	Total	24,147,317	100.0%

5. City-County Land Relationship: Most of the land in the Complex lies within the city limits. However, certain areas of "mark" land lying between Deaconess Addition and Tenth Avenue, "mark" land between the Talcott Addition and the Charles Russell Addition, and the vacant land east of the Charles Russell Addition are lands outside the city, and are viewed as land "in the County." [a/]

6. Zoning Classification: The vast majority of the land in the Complex has been zoned for Business use. The blocks zoned for Residential use lie within the city and they are--

1. The south side of Ninth Avenue between 3rd St. and 9th St.
2. The north side of Tenth Avenue between 15th St. and 16th St.
3. The north side of Tenth Avenue between 17th St. and 18th St.

7. Tenth Avenue Front Footage Zoning Use: The front footage of platted and unplatted property on Tenth Avenue amounts to 38.015 linear feet. In addition, there are 4,555 linear feet allocated for the width of streets into Tenth Avenue. The front footage zoning use breaks down as follows:

	Linear Feet
Business Use with building	17,214
Business Use with no building	655
Business Use with house	2,527
Business Use--vacant	16.919
Total Business Use	37,315
Residential Use	700
Grant Total	38,015

---

a/ "Mark" land can be explained as follows:
The county is divided into "Townships" and "Ranges" with a certain number of "Sections" in each "Township," e.g.; county land on the south side of Tenth Avenue between Twenty-sixth Street and Thirty-second Street is located in Section 17, Township 20 North, Range 4 East. The physical boundaries of an area of land are stated and such an area of land is represented by one legal deed. Also, it is mapped off within whatever "Section" it is a part, and identified by a "Mark" number, e.g.; John Doe, owner, Mark 7, Sec. 17, Twp. 20 No., Range 4 E.

Of the business-zoned front footage located on Tenth Avenue in the western part (3rd to 30th St.) of the Complex, approximately 75 percent has developed to be business-zoned front footage with a business building. On the other hand, in the eastern part (30th to 57th St.) of of the Complex, only 17 percent of business-zoned front footage has developed to the point of having a business building. In fact, in the eastern part about 79 percent of business-zoned front footage is vacant. Of all the Business Use--Vacant front footage located on Tenth Avenue in the Complex, slightly less than 90 percent lies east of 30th Street.

II. REPORT SUMMARY

A. Summary Listing

The main purpose of this chapter is to summarize the findings developed through the research for this report. In brief, they show particularly the effect of the highway improvements undertaken by the State Highway Department in opening the O. S. Warden Bridge in 1951 and in expanding Tenth Avenue South to a four-lane highway in 1956.

The important findings are:

1. Establishment and Location of many businesses in the Complex.
2. Location advantages.
3. Growth in motor vehicle traffic.
4. Business development measured by building permit valuations.
5. Growth of assessed valuation in the Complex.
6. Growth of employment.
7. Land and building utilization in the Complex.

B. Establishment and Location of Many Businesses in the Complex

An important effect of the highway improvements was to influence many new businesses to locate in the Tenth Avenue Business Complex.

Chart 1 shows the trend of businesses locating within the Complex each year during the past twenty-five years.

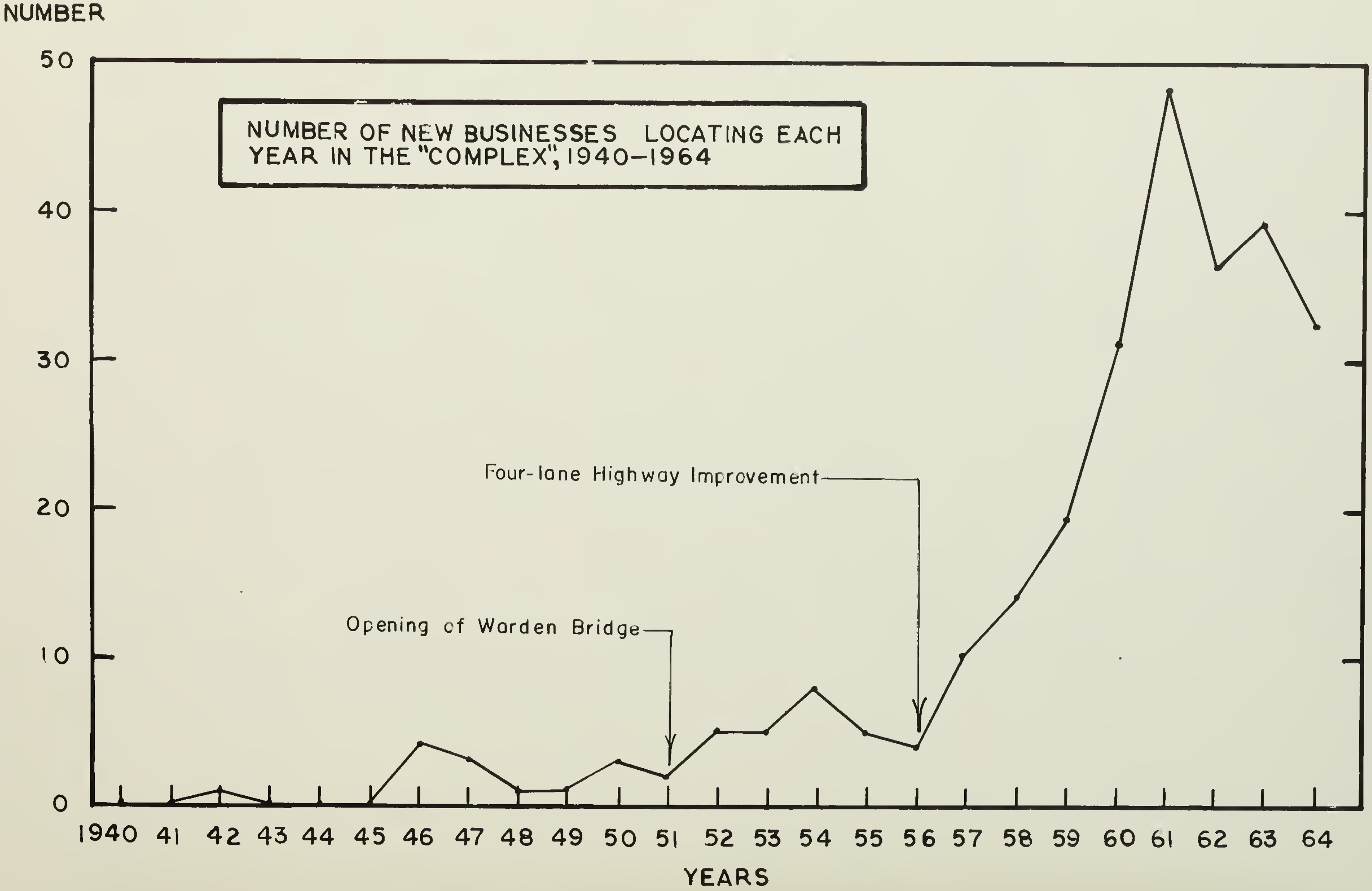
It is quite evident from the chart that very few businesses chose to locate in the Tenth Avenue South vicinity for the first twelve years, 1940-1951, of our survey. During this period of time, only 15 firms located within the Complex.

With the opening of the O. S. Warden Bridge in 1951, business firms locating within the Complex increased so that in the five year period, 1952-1956, 27 business firms were established. Thus, from 1940 through 1956, only 42 firms had located within the vicinity of Tenth Avenue.

During the year of 1956, the Montana State Highway Department expanded Tenth Avenue into a four-lane highway with median divider islands. The years immediately following this major highway improvement saw many additional business firms locating in the area of Tenth Avenue.

The number of additional firms increased each year from 1957 when 10 firms were established, to 1961, the year of 48 additional businesses. Even in the recent years of 1962-1964, the number of new firms each year averaged between 32 and 39. Thus, of the 272 businesses existing in the Complex as of 1964, 84 percent, or 229, of them located within the past eight years.

CHART I



NUMBER OF NEW BUSINESSES LOCATING EACH YEAR IN THE "COMPLEX", 1940–1964

Many business owners often express their opposition to the installation of medians in four-lane highway construction in business districts on the grounds that such barriers restrict the uncontrolled left-hand turning movements into their places of business. The evidence on Tenth Avenue South is to the contrary, however, as shown by the outstanding growth in new businesses which were located in this area after the installation of medians in 1956.

What types of business were predominant in locating in the Complex during these last eight years, i. e., 1957 through 1964? The following summary presents us with this information.

Located in the Complex in the Years 1957 through 1964

Commercial		101
Restaurants	19	
Gasoline Service Stations	17	
Automobile Dealers	14	
Household Trailers (Sales & Service)	5	
Retail Stores (All Types)	46	
Services		84
Medical & Health Services	26	
Financial, Insurance, & Real Estate	20	
Legal Engineering, & Accounting Service	5	
All Other Services	33	
Residential		23
Apartment Houses	18	
Motels	4	
Trailer Courts	1	
Wholesale & Storage		7
Public & Quasi-Public Bldgs.		6
Non-Manufacturing Industries		5
Manufacturing Industries		3
TOTAL		229

Chapter III--Analysis By Year of Location in the Complex presents additional factors regarding businesses locating in the area of Tenth Avenue South. The chapter develops information relative to (a) expansion of facilities of existing businesses, and (b) the formation of new business firms vs. the transfer of established firms.

C. Location Advantages

In the interviewing of operating businesses serving customers in the

Tenth Avenue Business Complex, a survey analysis sheet was used which asked, among other questions, "Do you consider this location advantageous over others in Great Falls?"

Out of a total of 269 interviews of operating businesses serving consumers, 83 percent, or 223 businesses, stated that they considered their Tenth Avenue South location had an advantage over others in Great Falls. The responses as to why they considered their location advantageous over others are listed in the following summary.

1.	More accessible than other city locations	152
2.	More parking for customers and employees	148
3.	Free Parking	121
4.	More traffic (customer and automobile)	123
5.	Space for expansion	94
6.	Shifting population center	80
7.	Lower rent	14
8.	Other	38

D. Growth in Motor Vehicle Traffic

The growth and development of Tenth Avenue South over the last three decades is reflected in the movement of vehicle traffic.

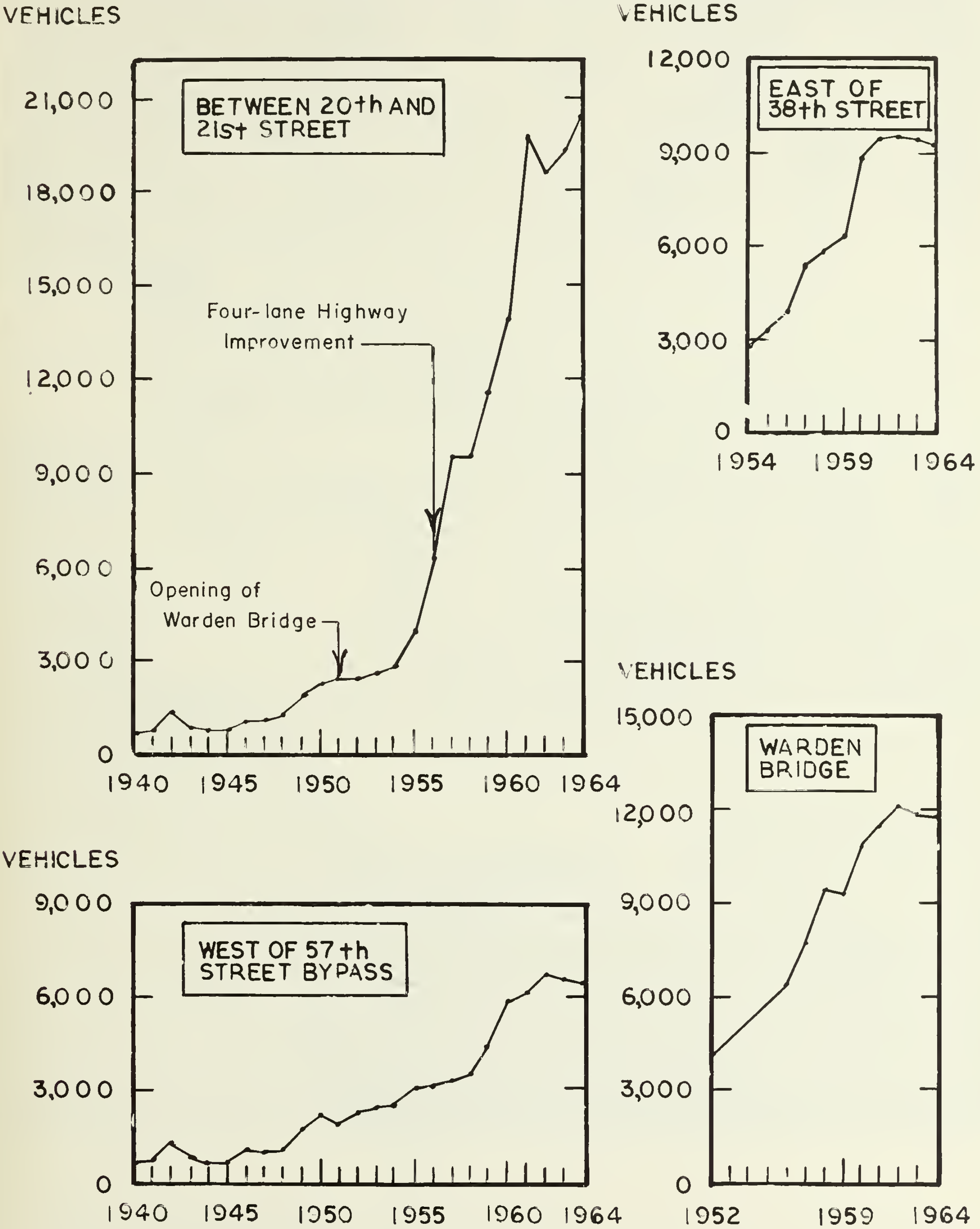
The Montana State Highway Department measures periodically the average daily traffic volume (ADT) at four locations on Tenth Avenue South. Two locations (between 20th and 21st Streets and West of 57th Street By-pass) have had their ADT counted prior to 1940, the beginning time period of our study. The year 1954 marked the initiation of ADT measurement just east of 38th Street. The average daily traffic volume (ADT) was measured at the Warden Bridge beginning in 1952.

Average Daily Traffic Volumes at Selected Locations
on Tenth Avenue South, 1940-1964

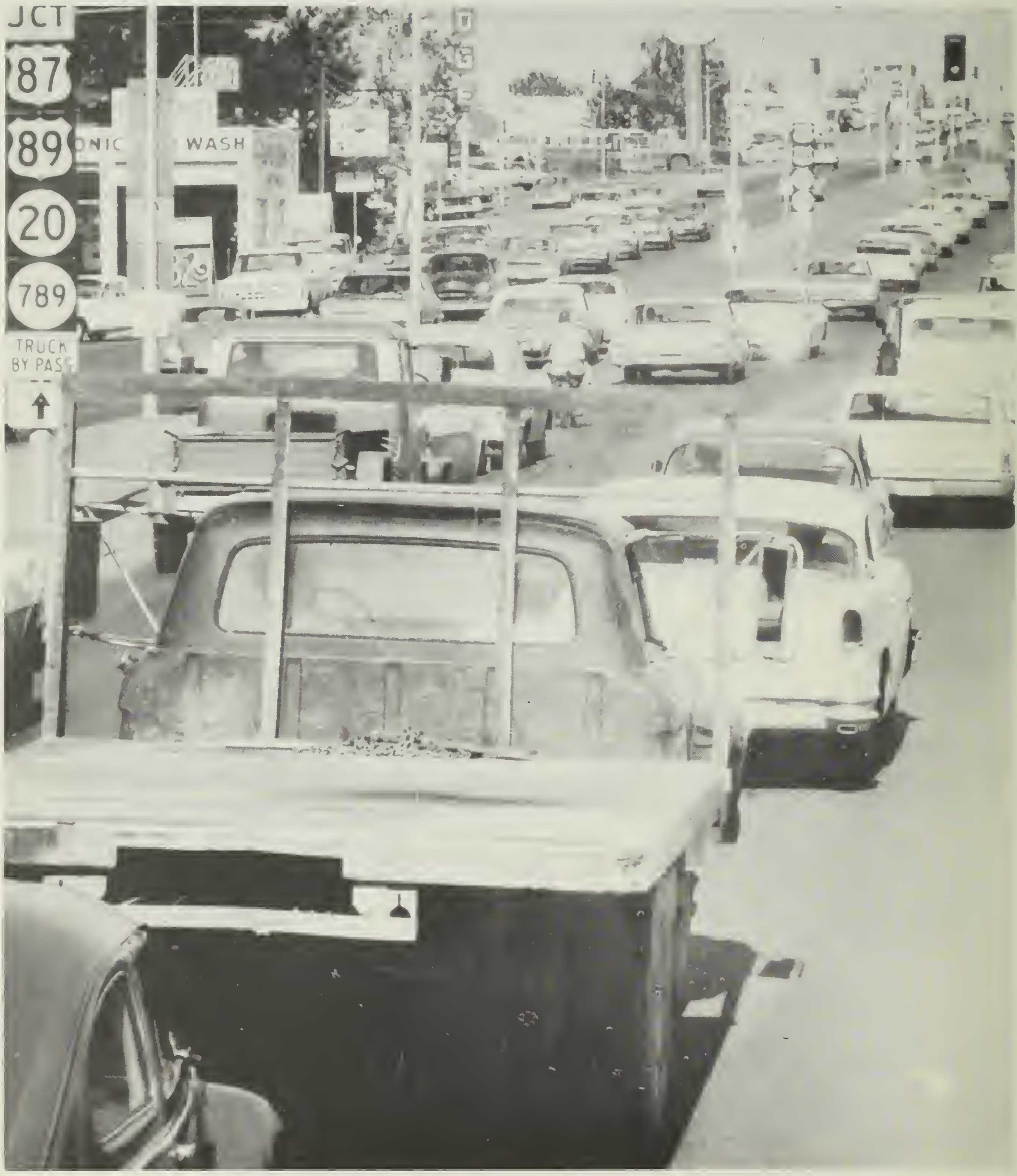
Year	At Warden Bridge	Bet. 20 and 21st Streets	East of 38th St.	West of 57th St. Bypass
1940		705		654
1945		730		673
1950		2,257		2,039
1952	4,090			
1954			2,725	
1955	5,885	3,948	3,250	3,065
1960	10,806	13,951	8,838	5,907
1964	11,790	20,480	9,240	6,450

CHART 2

AVERAGE DAILY TRAFFIC VOLUMES AT SELECTED LOCATIONS ON TENTH AVENUE SOUTH, 1940—1964



CURRENT TRAFFIC ON TENTH AVENUE SOUTH



3. Motor vehicle traffic on Tenth Avenue South at Ninth Street where for May 1965 the average daily traffic count by the Montana State Highway Commission was 24,884. This corner was the busiest in the state. (Photo: courtesy of Great Falls Tribune.)

A review of the data readily shows that from 1940 to 1964 the average daily traffic volumes (ADT) at two counting locations increased by 10 times and 29 times, respectively.

Also, when we consider all four locations we can conclude that during the last ten year period of 1955 through 1964, the ADT increased by a minimum in the neighborhood of 100 percent at the Warden Bridge to about 400 percent at the location between 20th and 21st Streets.

Using actual motor vehicle traffic data, the Montana State Highway Commission constructed an Index of Weighted Average Daily Traffic Volume for selected years. The Index is weighted, in that consideration is given not only to the actual traffic count but also to the mileage distance between counting locations thereby arriving at an average for the entire avenue. The following summary shows percent increases in the Index with different base years.

Year	Weighted Average Daily Traffic	Percent Increase from		
		1950	1955	1960
1950	2,250	---	---	---
1955	3,911	74	---	---
1960	10,822	381	177	---
1964	13,668	507	249	26

With the opening of the Warden Bridge to traffic in 1951 and the four-lane highway widening in 1956, it is readily apparent that these highway improvements were accompanied by an increase in motor vehicle traffic.

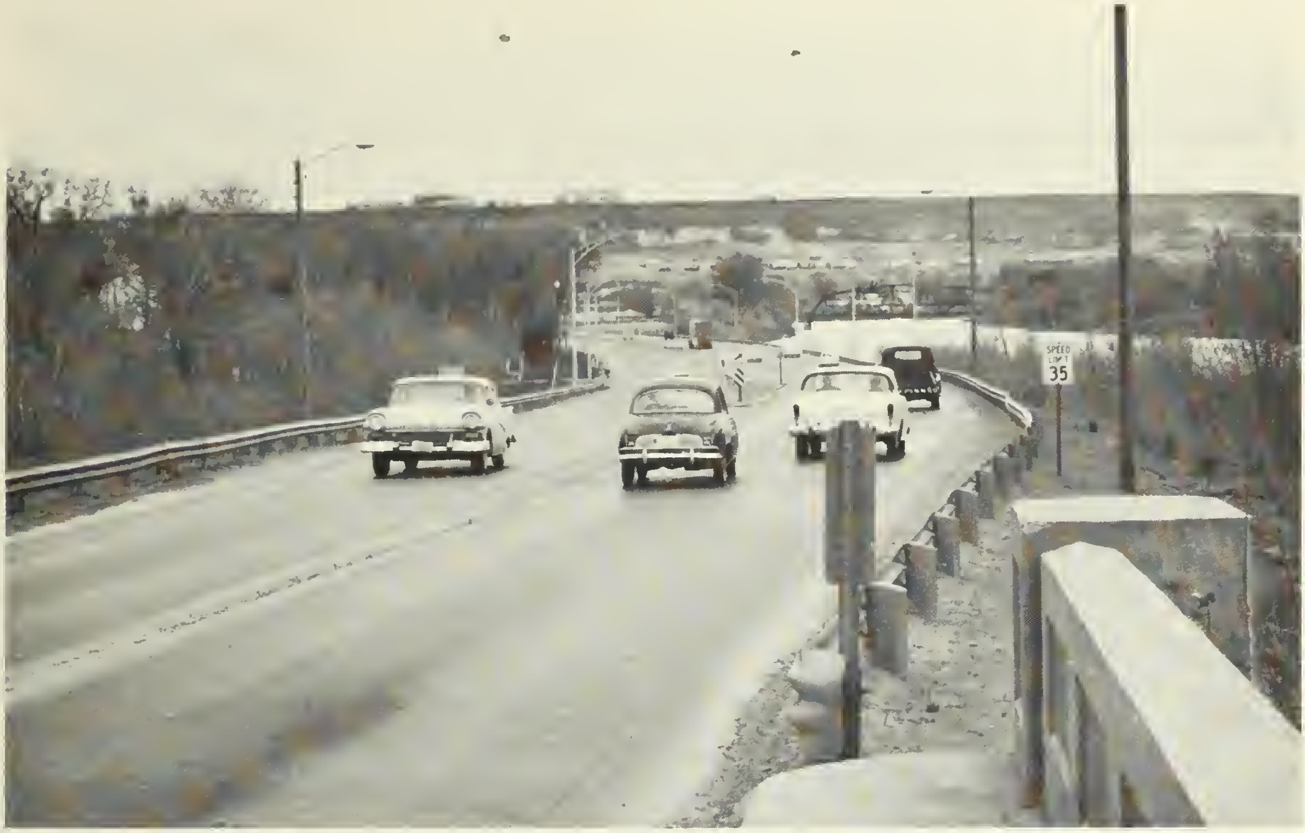
It is interesting to note that the Montana State Highway Department estimates that by 1981 the weighted average daily traffic volume along the length of Tenth Avenue South from 3rd Street to 57th Street will increase 132 percent over the 1964 weighted ADT.

Future Estimated Traffic on Tenth Avenue South

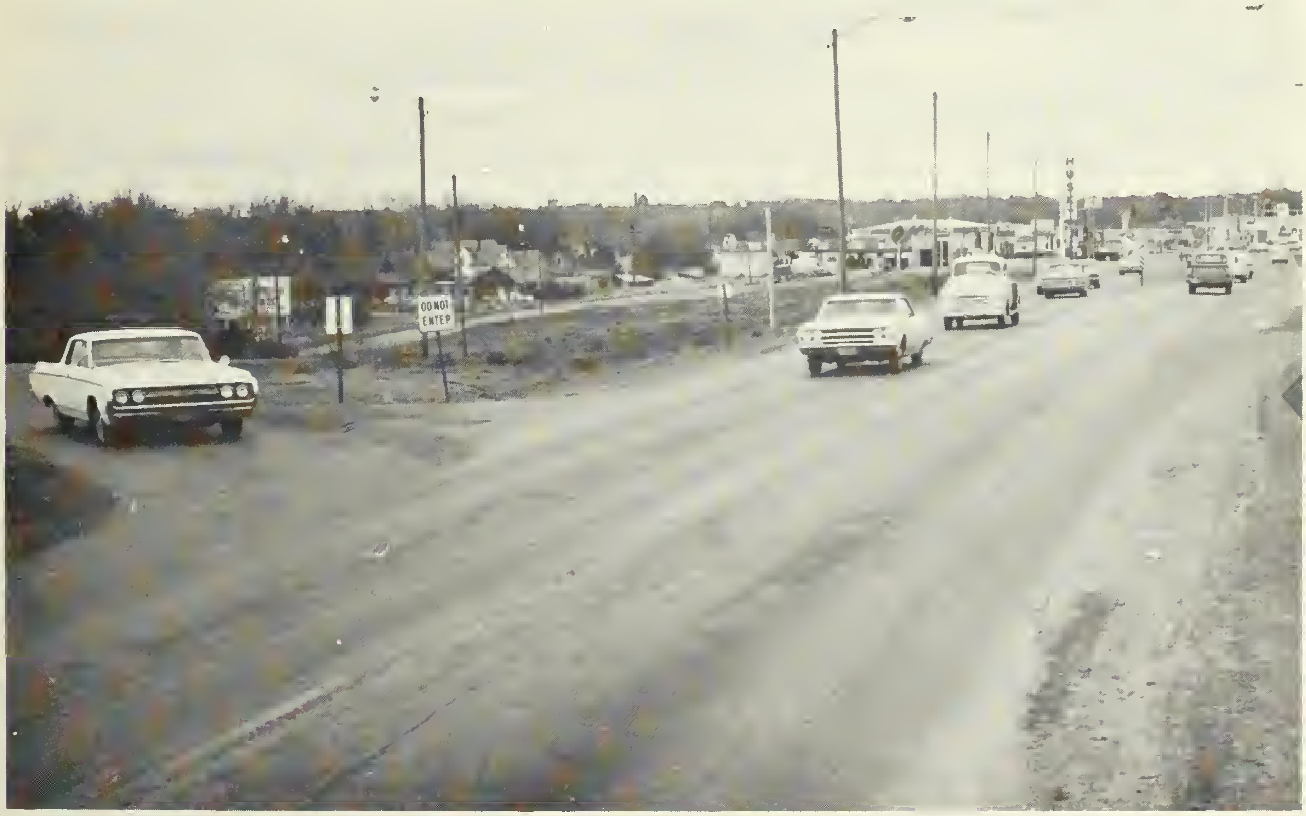
Year	Weighted Average Daily Traffic	Traffic Counts			
		Warden Bridge	Between 20 & 21 St.	East of 38 St.	West of 57 St.
1964	13,668	11,790	20,480	9,240	6,450
1981[e/]	31,662	38,815	37,906	25,531	14,203
1964 to 1981					
% Increase	132%	229%	85%	176%	120%
# Increase	17,994	27,025	17,426	16,291	7,753

e/ Estimates of Montana State Highway Department

4. Above, facing west on the O.S. Warden Bridge with its two-lanes of traffic. Below, distant view of the land approach of the O.S. Warden Bridge on the east side of the Missouri River.



5. Above, looking west from the two-lane O.S. Warden Bridge into the 4-lanes of Highway 91. Below, looking east from east entrance of two-lane O.S. Warden Bridge into the 4-lanes of island divided Tenth Avenue South.



It is anticipated by the Department that the largest percent increase in traffic will occur at the Warden Bridge where, for 1981, a 229 percent increase in ADT over 1964 is forecast. Also, at this location the largest increase in actual traffic is expected, namely 27,025 motor vehicles per day more than the average day (11,790 ADT) of 1964.

At the traffic-counting location Between 20 and 21 Street, which in 1964 was the location of highest traffic count (20,480 ADT), the smallest percent increase is expected, i. e., an 85 percent increase for 1981 over 1964.

Increases of 176 percent and 120 percent are forecast in the average daily traffic volume for 1981 over 1964 at 38th Street and 57th Street, respectively.

E. Business Development Measured By Building Permit Valuation

1. Background

Chapter V--Building Permit Valuation presents a detailed explanation and analysis of building permits issued for the City of Great Falls and the Tenth Avenue Business Complex. A page-by-page review of the Building Permit Register in the office of the Building Inspector of the City of Great Falls for the years from 1940 through 1964 was undertaken. Thus, complete data was recorded for each permit granted in the physical area of the Complex. In this manner, building permit data for the Complex was developed which enables the analysis to show by number and valuation for each year a building permit breakdown as follows:

Grand Total

1. Total Business
   - a. New Business
   - b. Additions to Business
   - c. Repairs and Alteration to Business
2. All Other

Also, since the year 1955, the Building Inspector's office summarizes in a similar manner the number and valuation of building permits granted each year on a city-wide basis. Thus, it has been possible to make a comparison between the city and the Complex relative to Grand Total valuation, Total Business valuation and All Other valuation.

2. Tenth Avenue Growth

In 1940, Tenth Avenue South was a highly undeveloped area consisting primarily of open space marked by the presence of an occasional residence.

The annual valuation of total building permits from 1940 to 1945 was only a few thousand dollars each year. In brief, they were as follows:

1940	$2,460
1941	3 325
1942	1,300
1943	525
1944	1,940
1945	4,900

The year of 1946 was the first year of reasonably substantial building permit issuance in the Complex. In that year, the total valuation of building permits issued for Tenth Avenue was $147,825 and these were for 30 residences. In the succeeding years through 1952, the annual total building permit valuations were markedly higher but very modest in comparison to building permit valuations issued in recent years. The higher level of permits issued from 1947 through 1952 was as follows:

1947	$45,550
1948	42 825
1949	13,850
1950	18,380
1951	42,650
1952	97,450

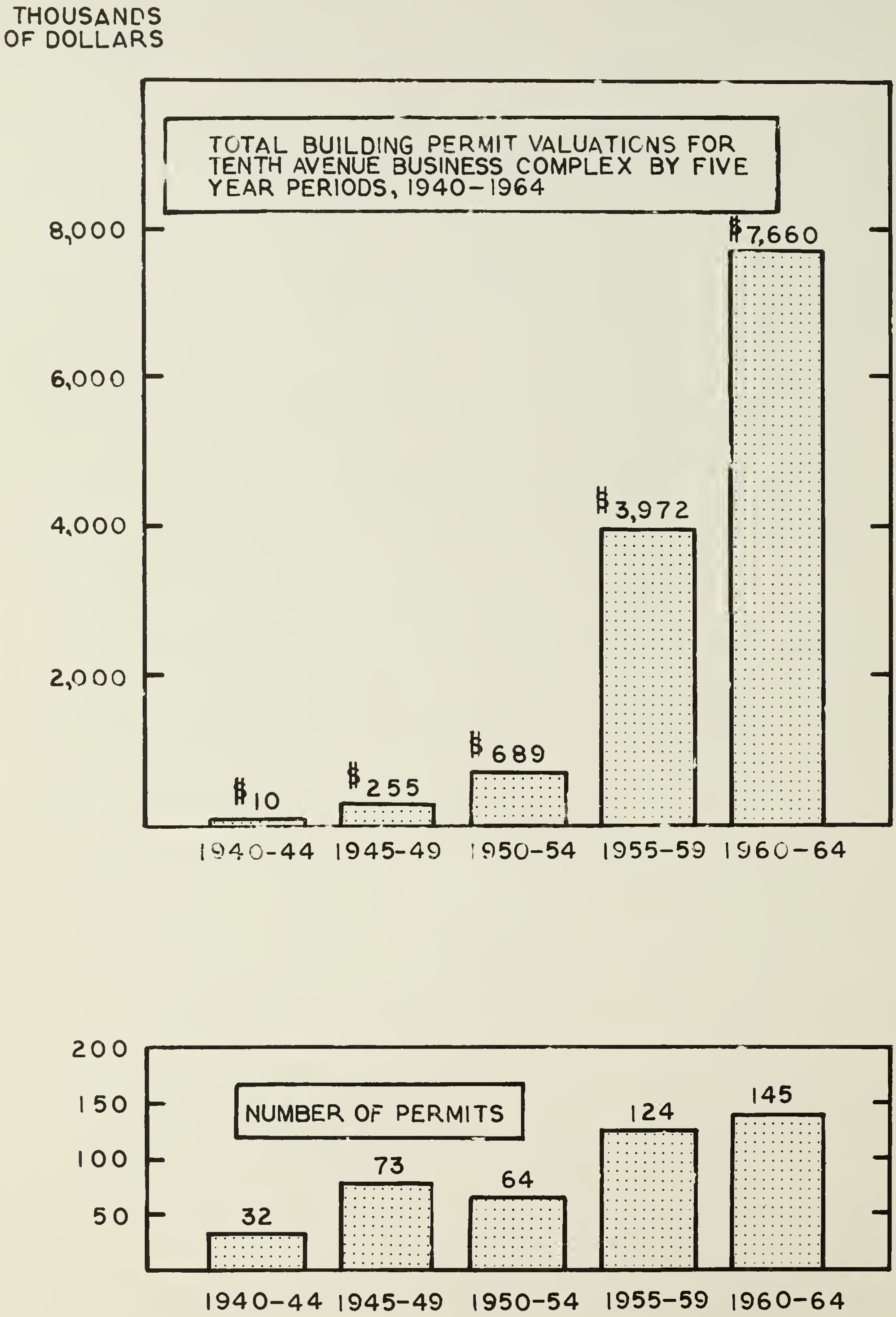
Beginning with the year 1952, the building permits issued for the Complex began to reflect permits issued for Business purposes. It was in the prior year, 1951, that the O. S. Warden Bridge across the Missouri River was completed and opened.

In order to show the trend of growth of building permits in the Complex Chart 3 shows by five-year periods from 1940 to 1964 the total number and valuation of building permits.

Let us particularly notice the tremendous increase in building permit valuation in the five-year periods of 1955-1959 and 1960-1964. Not only did the total dollar amount increase but even the value per permit increased as follows:

5-Year Periods	Total Valuation	Value Per Permit
1940-1944	$ 9,550	$ 298
1945-1949	254,950	3,492
1950-1954	688,930	10,765
1955-1959	3,971,885	32,031
1960-1964	7,660,223	52,829

CHART 3


THOUSANDS OF DOLLARS
TOTAL BUILDING PERMIT VALUATIONS FOR TENTH AVENUE BUSINESS COMPLEX BY FIVE YEAR PERIODS, 1940-1964
8,000
6,000
4,000
2,000
$10
$255
$689
$3,972
$7,660
1940-44
1945-49
1950-54
1955-59
1960-64
200
150
100
50
NUMBER OF PERMITS
32
73
64
124
145
1940-44
1945-49
1950-54
1955-59
1960-64

Since we are interested in analyzing the business impact of highway improvements, the accompanying summary shows us the importance of building permits issued for Business purposes and All Other purposes for the periods 1940-1964 and 1955-1964. During the twenty-five year period, 57% of the valuations of building permits issued for the Complex were for Business purposes, while only 43% were for All Other Purposes. Since Additions to Business and Repairs and Alterations to Business represented only 5% and 1%, respectively, of the 57% for Business purposes, then the major portion, 51%, represented building permits issued for New Businesses. In view of our preceding discussion, building permits issued for New Business were particularly prominent from 1952 through 1964.

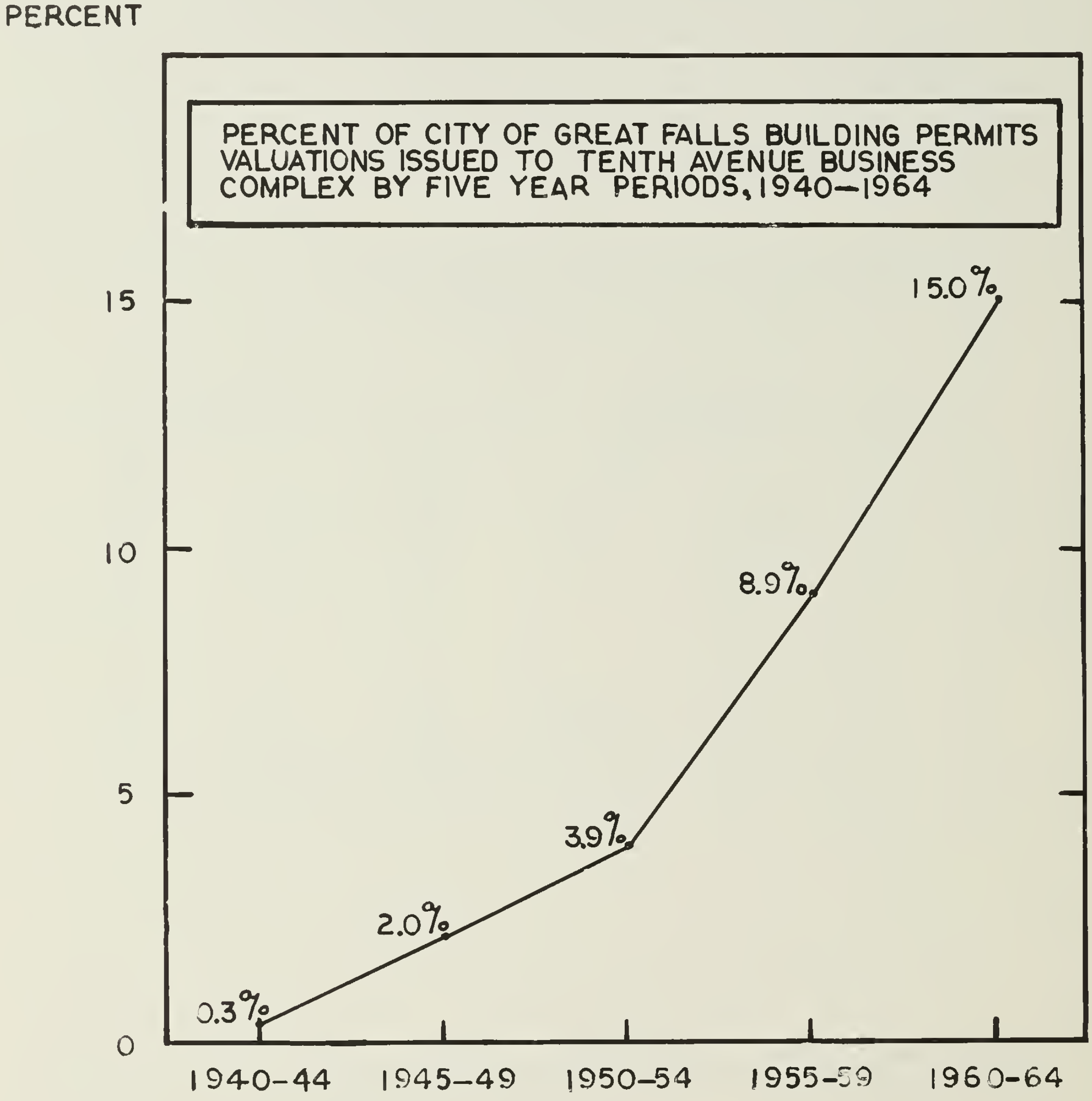
(thousands of dollars)

Building Permits Issued for Business and
All Other Purposes for Tenth Avenue Business Complex
1940-1964 and 1955-1964

Purpose Classification	1940-1964			1955-1964		
	Number of Permits	Valuation		Number of Permits	Valuation	
		$	% of TOTAL		$	% of TOTAL
Total Business	325	$7,180	57%	250	$6,469	56%
New Business	143	6,387	51	115	5,757	50
Additions	132	618	5	97	551	5
Repairs and Alterations	50	175	1	38	161	1
All Other	113	5,405	43%	19	5,163	44%
Grand Total	438	$12,586	100%	269	$11,632	100%

During the early years of the Tenth Avenue Business Complex development, the "All Other" building permit valuations quite naturally played a dominant role. General business activity was low and Tenth Avenue South was mainly residential. However, after 1951, new business increased steadily so that "Total Business" valuations became most important. It is true that the "All Other" valuation has remained high but this is due to several large "individual" building permits secured under this classification. First, the construction of the College of Great Falls at its new site on Tenth Avenue in 1959 contributed $1,700,000 to the "All Other" permit valuation. Secondly, the addition of a recreation center to this college in 1964 accounted for $1,150,000. Finally, the building permit for the new Deaconess Hospital contributed $2,200,000 in 1963. If we remove these data from their respective five-year time periods, "All Other" building permits for the Tenth Avenue

CHART 4


PERCENT OF CITY OF GREAT FALLS BUILDING PERMITS VALUATIONS ISSUED TO TENTH AVENUE BUSINESS COMPLEX BY FIVE YEAR PERIODS, 1940—1964

Business Complex is reduced to 1 percent for 1955-1959 and less than 1 percent for 1960-1964.

3. Comparision of Complex and City of Great Falls

A comparison of the total building permits issued for the Tenth Avenue Business Complex with the total issued for the entire city during the past twenty-five years indicates quite effectively that Tenth Avenue South has become a more important part of the city with the passing years.

The accompanying summary shows the increasing percents of building permits issued going to Tenth Avenue South. While in the five-year period, 1940-1944, Tenth Avenue South had only 0.3% of the total building permits issued, this relationship increased to 15% in the latest five-year period, 1960-1964.

(thousands of dollars)

Percent Relationship of Total Building Permit
Valuations of the City of Great Falls and the
Tenth Avenue Business Complex
By Five-Year Periods, 1940-1964

5-Year Periods	City of Great Falls	Tenth Avenue Business Complex	%
1940-1944	$ 3,700	$ 10	0.3%
1945-1949	12,653	255	2.0
1950-1954	17,762	689	3.9
1955-1959	44,838	3,972	8.9
1960-1964	50,420	7,660	15.0%

This relationship of the increase in importance of building construction in the Tenth Avenue area in comparison to the entire city is shown graphically in Chart 4.

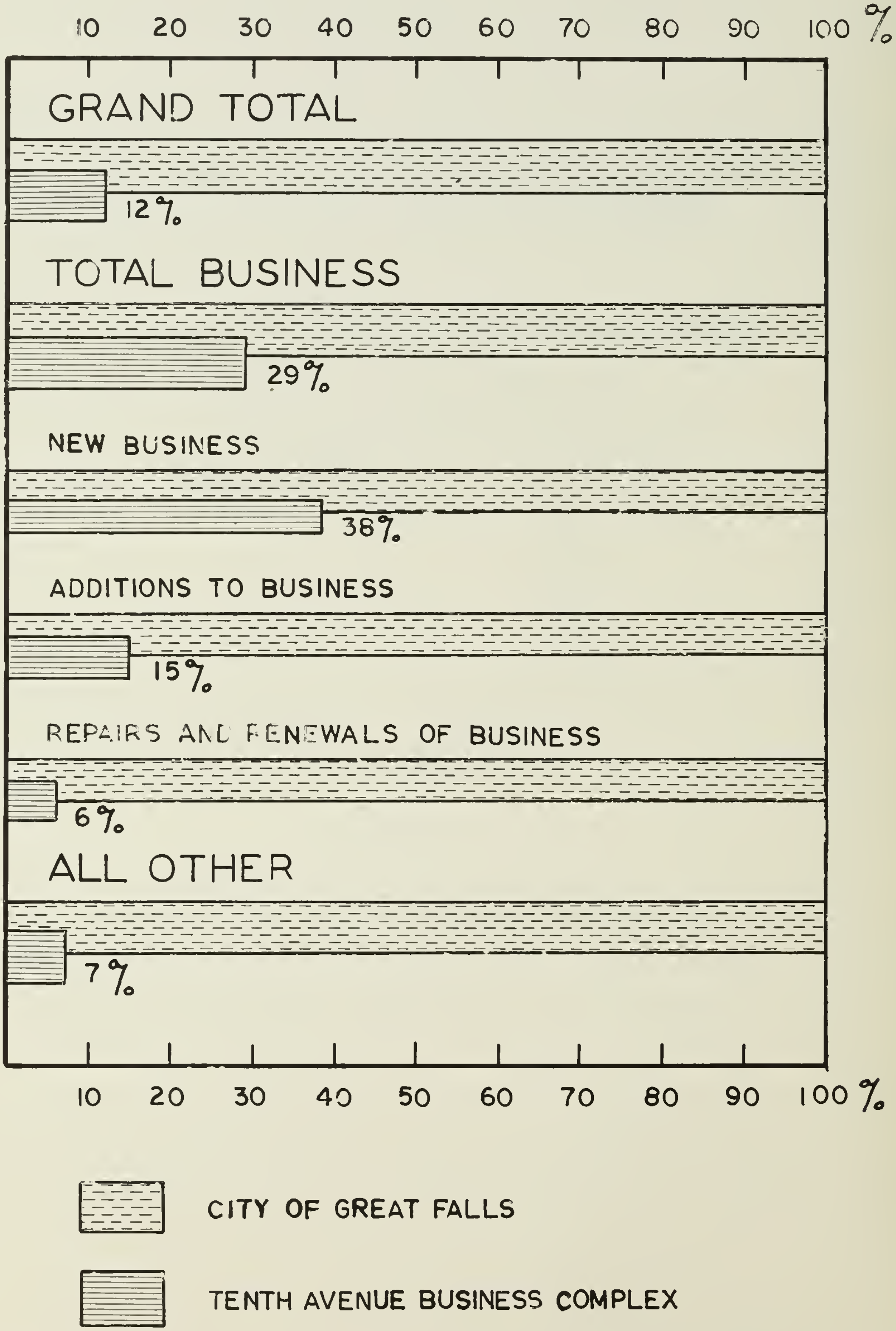
4. "New Business" Permits and the Complex

Another type of comparison between the City of Great Falls and the Tenth Avenue Business Complex that can be made is to show the building permits issued for each by Purpose Classification for the period, 1955-1964. It is necessary to confine our comparison to the 1955-1964 period because comparable building permit data for the City of Great Falls are available only for these years.

The following summary shows the percentage relationship of building permits by Purpose Classification which the Complex accounts for in the city during the period, 1955-1964.

CHART 5

PERCENT RELATIONSHIP OF BUILDING PERMITS, 1955–1964



(thousands of dollars)

Percent Relationship of Building Permits by Purpose Classification for City of Great Falls and Tenth Avenue Business Complex, 1955-1964

Purpose Classification	City of Great Falls	Tenth Avenue Business Complex	Tenth Avenue as % of City
Total Business	$22,610	$ 6,469	29%
New Business	15,123	5,757	38%
Additions	4,089	551	15
Repairs	3,397	161	6
All Other	72,648	5,163	7
Grand Total	$95,258	$ 11,632	12%

The above summary shows the important role that the Tenth Avenue Business Complex plays in the Total Business building permit valuation of the City of Great Falls. Even more significant than the Total Business figure (29%) is the 38% relationship of the permits issued for the New Business. Thus it can be stated that more than one-third of the New Business building permit valuation in the city during 1955-1964 is accounted for by the Complex. Although the "All Other" valuation is significant within the Complex, it is negligible when compared to the city, as exemplified by the 7%. The accompanying chart graphically shows these relationships.

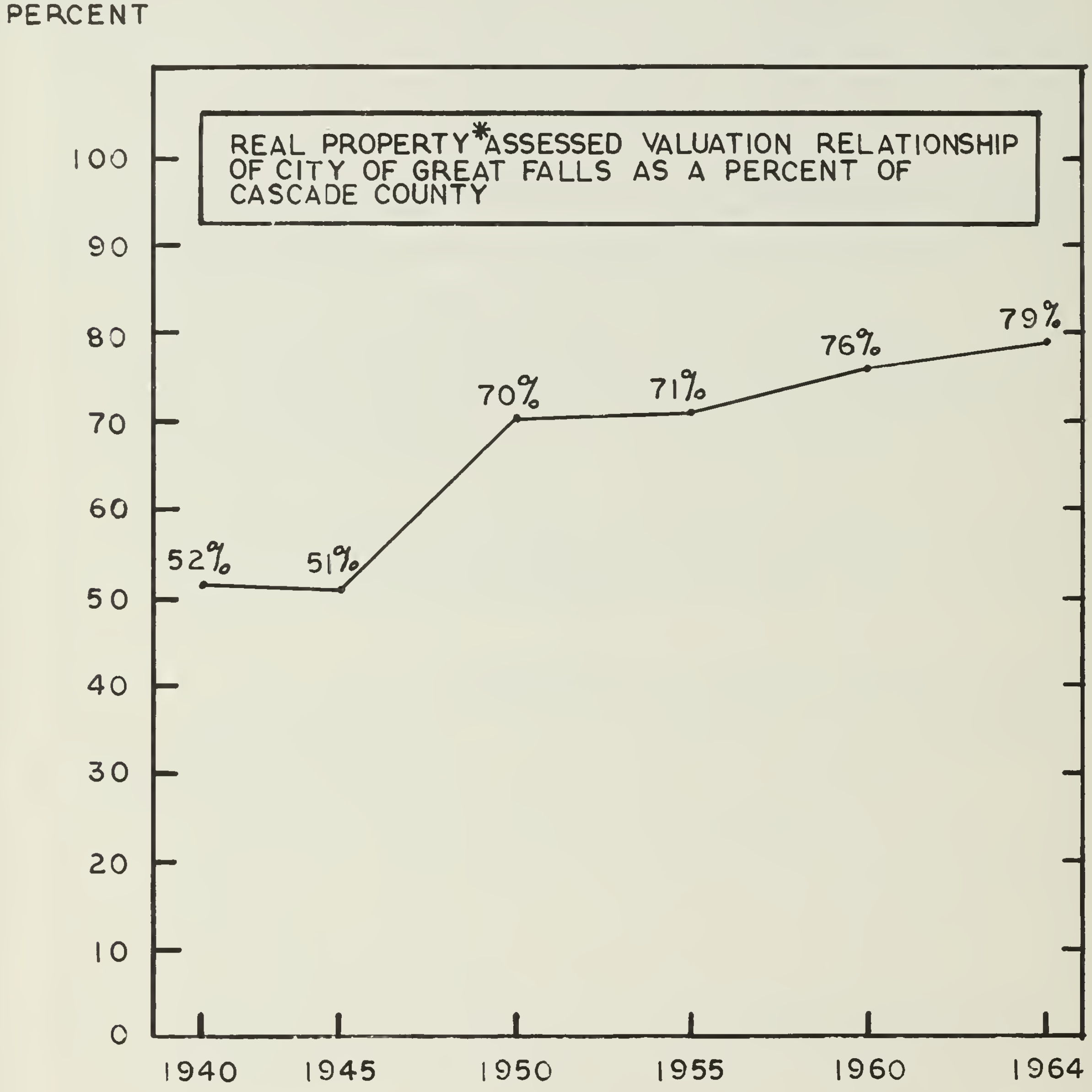
F. Growth of Assessed Valuations in the Complex

1. Background

Chapter VI--Assessed Valuation: A Measure of Commercial Development states certain essential facts relative to the legal aspects of property taxation in Montana as well as the sources and explanations of assessed valuation data used in this report.

For the period under review, 1940 to 1964, the City of Great Falls increased its real property assessment base faster than Cascade County as a whole. Real property assessment, as used in this study, includes the assessments for land and improvements and for public utilities. The following summary shows us the data of this relationship.

CHART 6



* LAND AND IMPROVEMENTS, AND PUBLIC UTILITIES.

(thousands of dollars)

Real Property* Relationship of Cascade County
and City of Great Falls By Selected Years, 1940-1964

Year	Cascade County	City of Great Falls	% City of County
1940	$ 73,502	$ 38,585	52%
1945	72,268	36,734	51%
1950	81,595	57,523	70%
1955	100,546	71,821	71%
1960	138,133	105,383	76%
1964	161,339	127,021	79%

*Land and Improvements, and Public Utilities

Chart 6 shows graphically the relationship of the real property assessments of Cascade County and the City of Great Falls for selected years.

The growth in the assessed valuation of real property in the City of Great Falls can be viewed in another light. While the increase from 1940 to 1964 was 230 percent, the growth from 1950 can be pictured as 120 percent, and even since 1960 the City has experienced a 21 percent increase. These relationships are shown below.

Percent Increase in Real Property* Assessed Valuation
in the City of Great Falls By Selected Years
(1940=100) (1950=100) (1960=100)

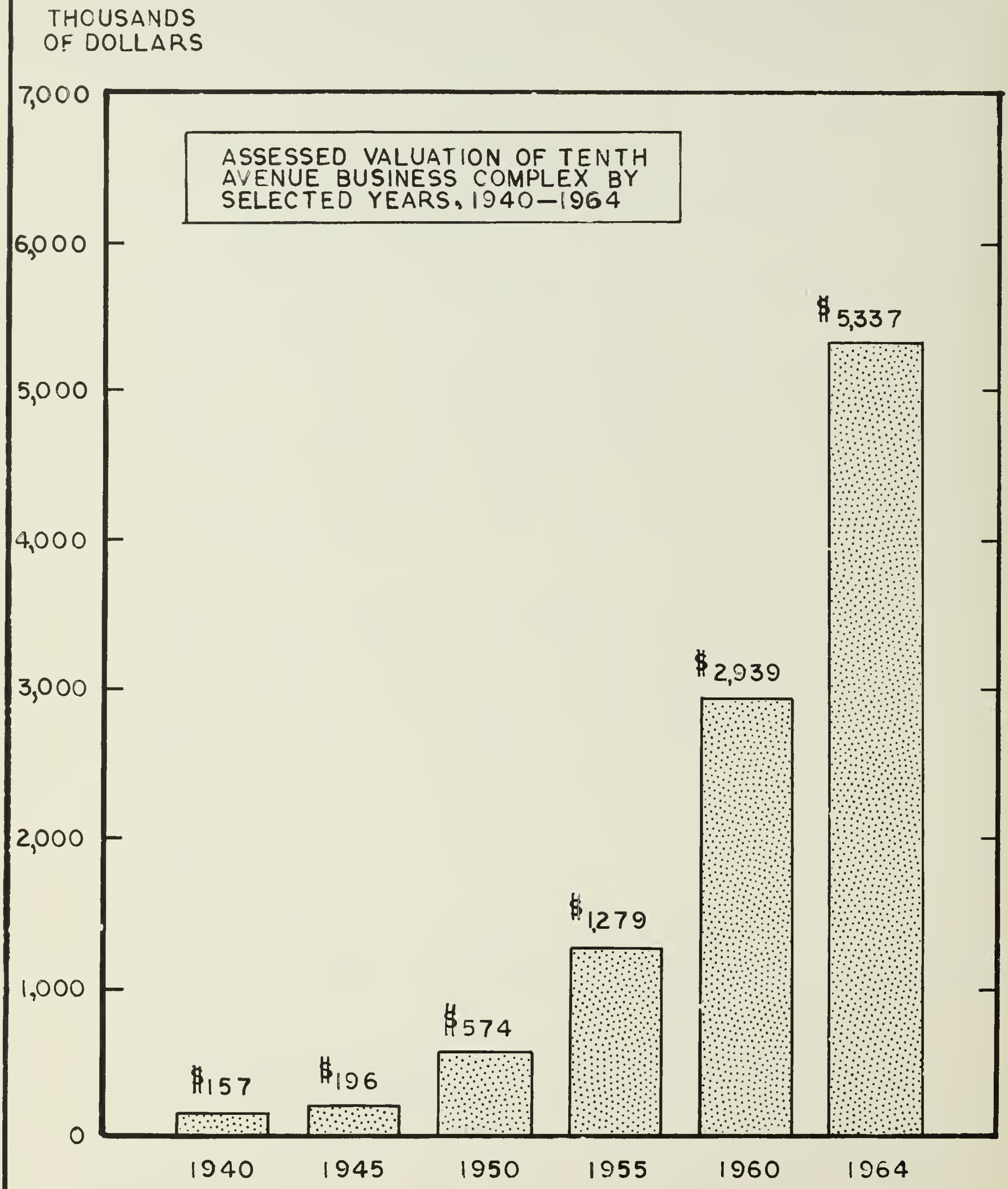
Year	City of Great Falls (000's of $)	1940=100	1950=100	1960=100
1940	$ 38,585	100	----	----
1945	36,734	95	----	----
1950	57,523	149	100	----
1955	71,821	186	125	----
1960	105,383	273	183	100
1964	127,021	330	220	121

*Land and Improvements, and Public Utilities

2. Growth of Tenth Avenue

While the assessed valuation of real property, as defined, in the City of Great Falls increased by 230 percent during the past quarter of a century, the increase in assessed valuation in the Tenth Avenue Business Complex shows an unbelievably large percentage, i.e., a 3,307 percent increase. The chief reason for this large increase is the small dollar assessment base of the Complex back in 1940 when Tenth Avenue was completely undeveloped. Also, the main type of improvements in the area at that time was primarily some residential houses.

CHART 7



ASSESSED VALUATION OF TENTH AVENUE BUSINESS COMPLEX BY SELECTED YEARS, 1940—1964

Chart 7 shows the change in the assessed valuation of the Tenth Avenue Business Complex by selected years from 1940 to 1964.

The summary below brings out the comparison between the percent increase in the City and the Complex assessed valuations since 1940. It should be noted that a large part of the change occurred in the Complex since 1950. It was in 1951 that the O. S. Warden Bridge was completed and in 1956 that Tenth Avenue was enlarged into a four-lane highway.

Since 1950, the Complex experienced an 830 percent increase in assessed valuation while the City as a whole enjoyed only a 120 percent increase. Even in the present decade, the Complex has increased by 82 percent during the past four years while the City moved along with a 21 percent increase in assessed valuation of real property, as defined.

Comparison of Percent Increase in Assessed Valuation
in City of Great Falls and Tenth Avenue Business Complex
(1940=100) (1950=100) (1960=100)

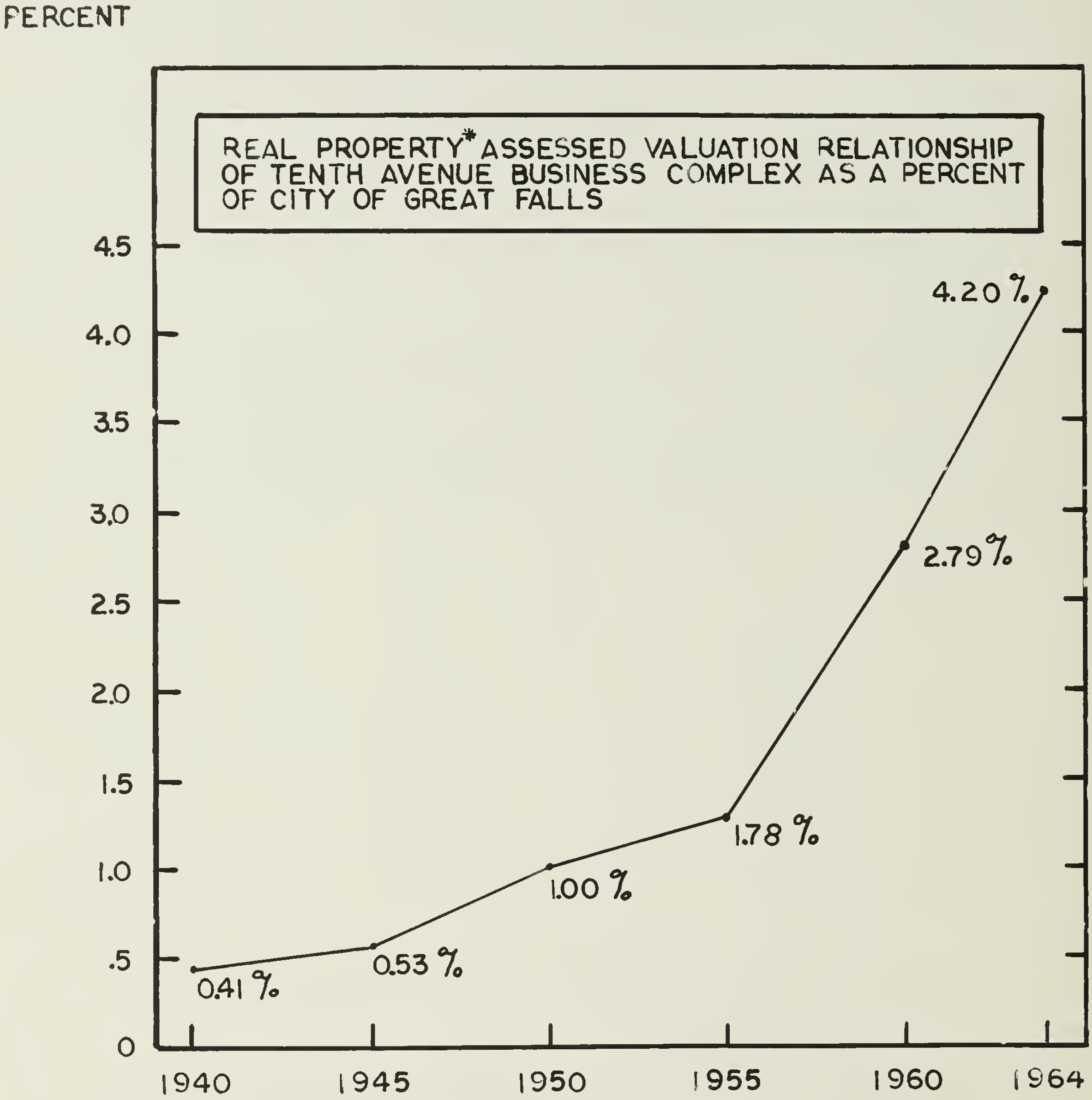
	City of Great Falls			Tenth Avenue Business Complex		
Year	1940=100	1950=100	1960=100	1940=100	1950=100	1960=100
1940	100	—	—	100	—	—
1945	95	—	—	125	—	—
1950	149	100	—	366	100	—
1955	186	125	—	816	223	—
1960	273	183	100	1876	512	100
1964	330	220	121	3407	930	182

3. Real Property Relationship of City and Complex

In 1940, the Tenth Avenue Business Complex had an assessed valuation of $156.676 which was only 0.41% of the City's real property, as defined, assessed valuation of $38,585,027. With the passing of the years, the assessed valuation of both the City and the Complex increased with the Complex increasing at a much faster rate than the City.

By 1964, the Complex had an assessed valuation of $5,337,385 which is currently 4.20% of the City's assessed valuation of $127,021,726. As can be observed in the following summary, a large part of the Tenth Avenue's growth has occurred since the 1950's, particularly from the year of 1955.

CHART 8



* LAND AND IMPROVEMENTS, AND PUBLIC UTILITIES.

Real Property* Assessed Valuation Relationship of
Tenth Avenue Business Complex as a Percent of City of Great Falls
By Selected Years: 1940-1964

Year	City of Great Falls (thousands of $)	Tenth Avenue Business Complex (thousands of $)	Tenth Avenue as % of City
1940	$ 38,585	$ 157	0.41%
1945	36,734	196	0.53%
1950	57,523	574	1.00%
1955	71,821	1,279	1.78%
1960	105,383	2,939	2.79%
1964	127,021	5,337	4.20%

* Includes Land and Improvements, and Public Utilities

Chart 8 shows the real property assessed valuation relationship of the City and the Complex for selected years from 1940 to 1964.

G. Relation of Weighted Average Daily Traffic Volume, Building Permits Adjusted, and Assessed Valuation

The average daily motor vehicle traffic has been counted at four specific locations on Tenth Avenue South for many years. Using actual motor vehicle traffic data, the Montana State Highway Commission constructed an Index of Weighted Average Daily Traffic Volume for selected years in the past. The Index is weighted, in that consideration is given not only to the actual traffic count but also to the mileage distance between the counting locations in arriving at a figure of average daily traffic for the entire section of highway. With 1955 as the base-year, the following summary shows for Tenth Avenue South the Index of Weighted Average Daily Traffic Volume.

Index of Weighted ADT (Tenth Avenue South)

	Actual Traffic Counts					
Year	Warden Bridge	Between 20 & 21 St.	East of 38 St.	West of 57 St.	Weighted Average ADT	Index: 1955=100
1955	5,885	3,948	3,250	3,065	3,911	100
1960	10,806	13,951	8,838	5,907	10,822	277
1964	11,790	20,480	9,240	6,450	13,668	349

With the opening of the Warden Bridge to traffic in 1951 and the four-lane highway widening in 1956, it is readily apparent that these highway improvements were accompanied by an increase in motor vehicle traffic.

Parallel with the increase in the Index of Weighted ADT, building permit valuations and real property assessed valuations likewise increased. Below is a summary of the Indexes of Weighted ADT, Building Permits Adjusted, and Assessed Valuation.

Before reviewing the data, perhaps a word is in order regarding the meaning of Building Permits Adjusted. Inasmuch as building permit valuations fluctuate widely from year to year, an average year of a five-year period was selected, i.e., for 1955 an average year was obtained from 1953 to 1957 data. For 1960, the years averaged were 1958 to 1962. For 1964, a three-year average was developed using 1962, 1963, and 1964.

In order to render the building permit data comparable with the assessment data, the 1960 building permit valuation was reduced by $1,700,000, the value of the College of Great Falls permit whose real property is tax exempt as an educational institution. Also, the 1964 building permit valuation was lowered by $1,150,000 for CGF Student Recreation Center and $2,200,000 for the new Deaconess Hospital which is likewise a tax exempt institution. With these comments, the following summary presents the indexes of these three concepts with 1955 as the base-year.

	Indexes of (1955=100)		
Year	Weighted ADT	Building Permits Adjusted	Assessed Valuation
1955	100%	100%	100%
1960	277	359	230
1964	349	426	417

If the building permit valuations were not adjusted for the tax exempt institutions, then the 1964 building permit index would be 882%.

Also, if 1950 was selected as the base-year, the weighted ADT index for 1964 would be 607%. Also, on a 1950 basis Building Permits Adjusted would climb to 2,419% since the base-year of 1950 reflects to a large extent residential permits. Permits for business development were not at this time of importance to Tenth Avenue South. Hence, the size and content of a 1950 base-year for building permits give a distorted sense of growth. Assessed Valuation on a 1950 basis would be 930%.

On a 1950 basis, if building permits were not adjusted to remove the tax exempt institutions, then the 1964 building permit index would be 5014%. The weakness of 1950 as the base-year has been commented upon in the preceding paragraph.

H. Growth of Employment

Parallel with the increase in the number of business firms in the Tenth Avenue Business Complex was the growth in employment. Employment data for the year 1964 were obtained by personal interviews from all business establishments within the Complex.

Total employment as of September 1964 in the Complex was 2,355. Since it was not possible to obtain reliable employment estimates for previous periods of time, we can reasonably assume, however, that the employment increase from 1940 to 1964 was from a few employees to 2,355.

Of the 2,355 total employees, 1,758, or 75 percent, were employed full-time while 597, or 25 percent, were part-time.

Male employment of 1,546 represented 66 percent of the total, while female employment with 897 workers accounted for the remaining 34 percent.

Commercial establishments and Service operations furnished the major sources of employment in the Complex by employing 50 percent and 20 percent of the total, respectively.

As of September 1964, the Tenth Avenue Business Complex's employment was approximately 10 percent of the total employment in Cascade County.

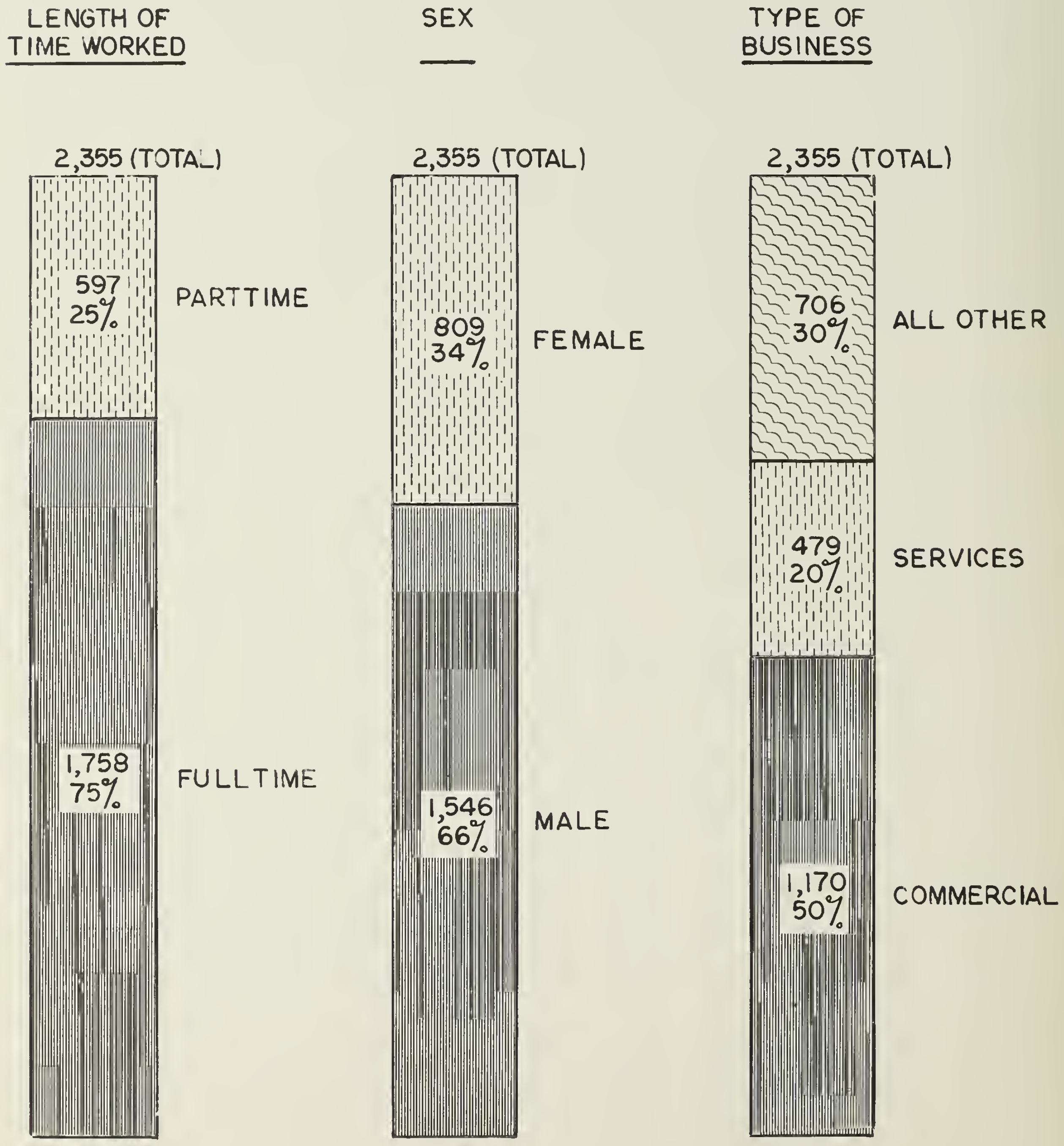
Chapter VII--Employment: A measure of Commercial Development furnishes greater details in terms of (a) employment by type of business, (b) employment by type of activity (administrative, sales and operating), and (c) emphasis on the role of Commercial and Service establishments in giving employment opportunities in the Tenth Avenue Business Complex.

I. Land and Building Utilization

A final point of summary is to present for the Complex its characteristics of land and building utilization, i. e., data relative to land area, floor space, parking area, outside storage area, area in other use, and vacant area. Table 1 presents a statistical summary of these categories of land utilization with a breakdown into each of the twelve areas. Also, Table 2 shows us the same total category data by the bureau of Public Road's land use activities (business and non-business) which compose the Complex. Chapter VIII analyzes in detail land use by type of activity.

CHART 9

EMPLOYMENT IN THE "COMPLEX" AS OF SEPTEMBER 1964



A summary of total data shows that the Complex has as of 1964:

Land	Square feet
Platted and unplatted	24,147,317
Rights-of-way	6,684,180
Total	30,831,497
Floor Space	
Land Cover (first floor) of improvements	1,386,698
Floors above and below first floor (no basements)	373,999
Total	1,760,697
Parking Area	3,581,218
Outside Storage Area	186,161
Area in Other Use	10,195,403
Vacant Area	8,797,837

1. Land: The Complex has a total land area of 30,831,497 square feet (or 1.11 square miles), and consists of 24,147,317 sq. ft. of platted and unplatted land and 6,684,180 sq. ft. of rights-of-way for avenues, streets, and alleys. With the area (land and water) of the City of Great Falls in 1964 being 14.34 square miles, then the Complex represents an area comparable to 7.7 percent of the city's total area.

About 86% of the total land of the Complex is accounted for by areas on the south side of Tenth Avenue. Area #12 (38th to 57th St.) is the largest land area with 7,609,512 sq. ft. Of importance in this area are the sand and gravel pit operation (5,168,830 sq. ft.) and the Glacier Greyhound Park (1,668,784 sq. ft.). Area #8 (20th to 30th St.) is the second largest in size with 6,276,281 sq. ft. In this area the College of Great Falls represents a high percentage of the land area with 4,526,755 sq. ft.

Reference to Table 2--Land Use Characteristics and Their Rank By Types of Land Use Activities, shows us the allocation of land from another viewpoint. The following summary accounts for the majority of land use in the Complex.

TABLE 1

Land Use Characteristics and Their Rank By Areas (square feet)

Area	Land[a/]	RANK	Floor Space [b/]	RANK	Parking Area	RANK	Outside Storage Area	RANK	Area In Other Use	RANK	Area Vacant	RANK
1	617,696	8	174,713	4	104,905	9	5,595	2	295,848	5	51,135	9
2	2,744,400	3	188,016	3	534,205	3	164,779	1	1,344,747	2	516,558	5
3	286,750	12	35,098	9	83,308	11	1,806	6	141,368	10	25,338	11
4	1,517,155	4	256,068	2	811,442	1	120	9	198,859	9	293,566	7
5	537,710	9	152,555	5	144,586	6	4,227	4	273,977	6	11,662	12
6	349,725	11	70,758	8	124,891	8	3,810	5	108,466	11	44,788	10
7	1,221,648	6	106,812	6	407,946	4	480	7	576,619	4	134,673	8
8	6,276,281	2	613,905	1	800,179	2	5,160	3	844,954	3	4,254,184	1
9	515,413	10	33,440	10	98,407	10	0	-	60,071	12	323,495	6
10	1,200,867	7	72,746	7	140,892	7	144	8	237,638	7	757,085	4
11	1,270,160	5	26,154	12	24,457	12	40	10	235,098	8	990,031	3
12	7,609,512	1	30,432	11	306,000	5	0	-	5,877,758	1	1,395,322	2
TOTAL	24,147,317		1,760,697		3,581,218		186,161		10,195,403		8,797,837	

[a/] In addition,, there are 6,684,180 square feet of rights-of-way for avenues, streets and alleys. Total Land equals 30,831,497 square feet.

[b/] Land Cover (first floor) of improvements amounts to 1,386,698 square feet.

TABLE 2

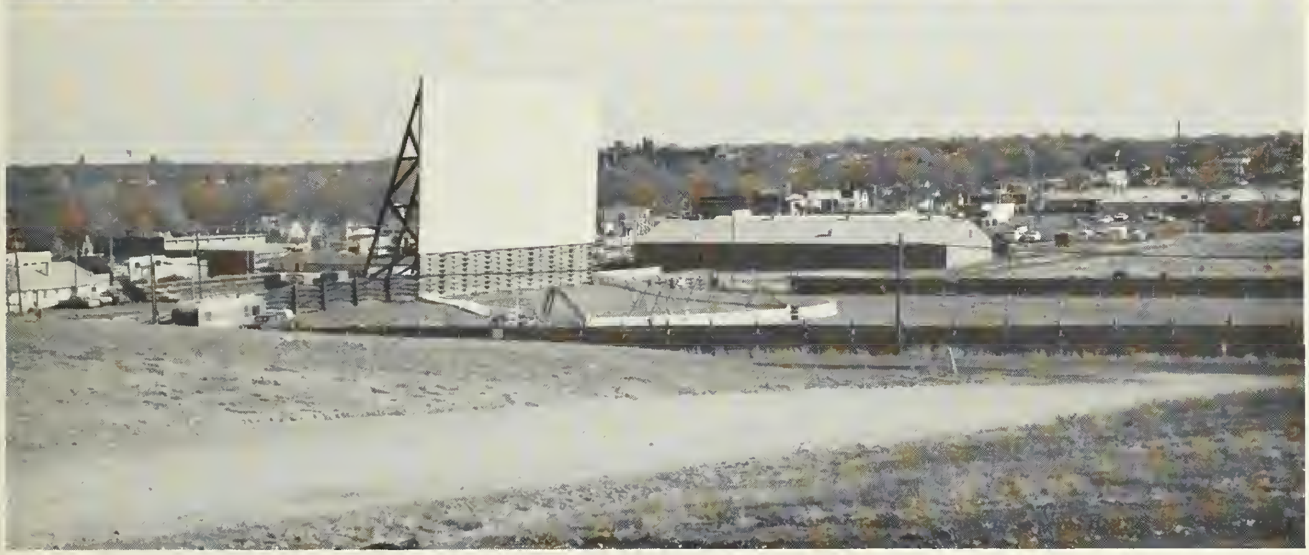
Land Use Characteristics and Their Rank By Broad Types of Land Use Activities (square feet)

Types of Land Use Activities	Land a/	RANK	Floor Space b/	RANK	Parking Area	RANK	Outside Storage Area	RANK	Area In Other Use	RANK	Vacant Land	RANK
I. Residential	2,740,986	5	441,034	2	459,106	2	4,227	4	1,939,949	2	8,152	6
II. Manuf. Indus.	288,367	8	25,800	7	248,007	6	14,560	2	0	-	0	-
III. Non-Manuf. Indus.	5,236,381	2	11,328	8	0	-	1,000	5	5,225,630	1	7,063	7
IV. Commercial	2,911,829	4	541,285	1	1,674,252	1	156,107	1	347,381	5	208,732	4
V. Wholesale and Storage	78,122	9	72,975	5	25,910	7	900	6	0	-	1,780	8
VI. Services	762,831	7	212,020	4	425,572	4	9,367	3	52,644	7	94,707	5
VII. Pub. & Quasi-Pub. Buildings	5,349,339	1	427,007	3	442,371	3	0	-	697,582	4	3,965,406	1
VIII. Pub. & Quasi-Pub. Open Space	2,586,784	6	28,096	6	306,000	5	0	-	1,629,264	3	623,424	3
IX. Other Open Space	4,192,678	3	1,152	9	0	-	0	-	302,953	2	3,888,573	2
TOTAL	24,147,317		1,760,697		3,581,218		186,161		10,195,403		8,797,837	

a/ In addition, there are 6,684,180 square feet of rights-of-way for avenues, streets and alleys. Total Land equals 30,831,497 square feet.

b/ Land Cover (first floor) of improvements amounts to 1,386,698 square feet.

6. Above, the College of Great Falls occupies 4,526,755 square feet of the Complex's 24,147,317 platted and unplatted land area. This major addition to the area was constructed in 1959 and was opened in 1960. Below, constructed in 1964 and opened in 1965, the new Deaconess Hospital is a valuable addition to the Complex. Like the College of Great Falls, it attracts many supplementary businesses to the Tenth Avenue area.



7. Above, the Sand and Gravel Pit occupies 5,168,830 square feet. The 10th Avenue Drive-In Theater utilizes 250,000 square feet. Below, Glacier Greyhound Park (including golf driving range) requires 1,668,784 square feet.

			square feet	% of TOTAL
a.	Public and Quasi-Public Buildings		5,349,339	22.1%
	(College of Great Falls:	4,526,755)		
	(Deaconess Hospital:	365,000)		
	(Churches:	142,500)		
b.	Non-Manufacturing Industries		5,236,381	21.6%
	(Sand and Gravel Pit:	5,168,830)		
c.	Other Open Space		4,192,678	17.3%
	(Vacant land:	3,938,998)		
	(General farms:	253,680)		
d.	Commercial		2,911,829	12.0%
	(Retail Stores, All Types:	1,543,669)		
	(Restaurants, All Types:	658,030)		
	(Gasoline Service Stations:	418,295)		
e.	Residential		2,740,986	11.3%
	(Single dwelling units:	1,677,128)		
	(Apartment houses:	459,509)		
	(Motels:	497,149)		
	(Trailer Courts:	107,200)		
f.	Public and Quasi-Public Open Space		2,586,784	10.7%
	(Race Track, Incl. Golf Range:	1,668,784)		
	(Public Parks:	668,000)		
	(Drive-in Theater:	250,000)		
g.	Services		762,831	3.1%

2. Floor Space: The total floor space of the establishments and residences in the Complex is 1,760,697 square feet. Since the Land Cover (first floor) of improvements amounts to 1,386,698 sq. ft., there are 373,999 sq. ft. on floors other than the first floor. Basement areas were not considered.

The broad types of land use activities which account for the majority of the total floor space in the Complex are summarized below. In order of size, they are:

		square feet	% of TOTAL
a.	Commercial	541,285	30.7%
b.	Residential	441,034	25.0%
c.	Public and Quasi-Public Bldgs.	427,007	24.2%
d.	Services	212,020	12.0%

COMMERCIAL includes retail outlets (all types), eating and drinking establishments, auto dealers, gasoline service stations, and household trailers (sales and service).

RESIDENTIAL includes motels, trailer courts, apartment houses, and single dwelling units (houses).

PUBLIC AND QUASI-PUBLIC BUILDINGS includes College of Great Falls, Deaconess Hospital, churches, non-profit organizations (VFW, Union Temple), and indoor amusement and recreation centers (Skyway Bowl).

SERVICES includes those classified as personal; business; financial, insurance and real estate; medical and health; legal, engineering, and accounting; etc.

3. Parking Area: The total space available for parking in the Complex is 3,581,218 square feet. Parking facilities for Commercial types of businesses are by far the most important, i.e., 1,674,252 sq. ft. or 46.9% of the total. Holiday Village Shopping Center with approximately 624,164 sq. ft. of parking space possesses a large part of the Commercial total.

Other facilities in the Complex with sizeable space allocated for parking are:

	square feet	% of the Total
Retail Stores, all types	940,385	26.2%
Restaurants, all types	401,903	11.2%
Services, all types	425,572	11.8%
Glacier Greyhound Park	306,000	8.5%
College of Great Falls	280,000	7.8%
Deaconess Hospital	97,000	2.7%

4. Outside Storage Area: Many establishments, particularly those of a Commercial type, handle and sell large quantities of products which require considerable storage space. Most of the time, it is neither feasible nor practical to store all the goods in the main building of the business. Consequently, warehouses and sheds are constructed to handle these large inventories, and these types of facilities are viewed as Outside Storage Area.

There are 186,161 square feet of Outside Storage Area in the Complex, and of this total 156,107 sq. ft. belong to Commercial type of business. Most of the total lies in Area # 2 which has 164,779 sq. ft.

5. Area In Other Use: There are 10,195,403 square feet of land in the Complex allocated to this use. Such land has been set aside for a specific business or esthetic use other than as land cover of an improvement, an outside storage area, or parking. Also, it should be mentioned that land, which appears to be vacant land in some instances, actually has been allocated to a definite use, such as the lands of the sand and gravel pit operation, drive-in theater, parks, as well as the lawns and driveways of residences and certain businesses.

The more important land designated as Area in Other Use are:

		square feet	% of TOTAL
a.	Non-Manufacturing Industries	5,225,630	51.2%
	(Sand and Gravel Pit: 5,165,630 sq. ft.)		
b.	Residential	1,939,949	19.0%
c.	Public and Quasi-Public Open Space	1,629,264	15.9%
	(Public parks: 668,000)		
	(Drive-in Theater: 249,136)		
	(Glacier Greyhound Park: 712,128)		
d.	Public and Quasi-Public Buildings	697,582	6.8%
	(College of Great Falls: 516,539)		
	(Deaconess Hospital: 70,000)		
	(Churches: 111,043)		

6. Vacant Area: The total vacant area in the Complex is 8,797,837 square feet. The two areas with the largest amount of vacant land are listed below according to size.

		square feet	% of TOTAL
a.	Area #8 (20th-30th St.)	4,254,184	48.3%
	(College of Great Falls: 3,575,406)		
	(Deaconess Hospital: 151,000)		
b.	Area #12 (38th-57th St.)	1,395,322	15.8%
	(Glacier Greyhound Park: 623,424)		

The remainder of the vacant land is spread throughout all areas, particularly Area #11 with 990,031 sq. ft.; Area #10 with 757,085 sq. ft.; and Area #2 with 516,558 sq. ft.

III. ANALYSIS BY YEAR OF LOCATION IN THE COMPLEX

The purpose of this chapter is to analyze the land use activities structure of the Complex according to the following criteria:

1. The year in which a business located in the Complex
2. Expansion of the facilities of a business
3. Formation of new business firms vs. the transfer of established business firms

A. Year of Location

Chart 10 shows the trend of establishments locating within the Complex each year during the past twenty-five years.

It is quite evident from the chart that very few businesses chose to settle in the Tenth Avenue South vicinity for the first twelve years, 1940-1951, of our survey. During this period of time, only 15 establishments located within the Complex.

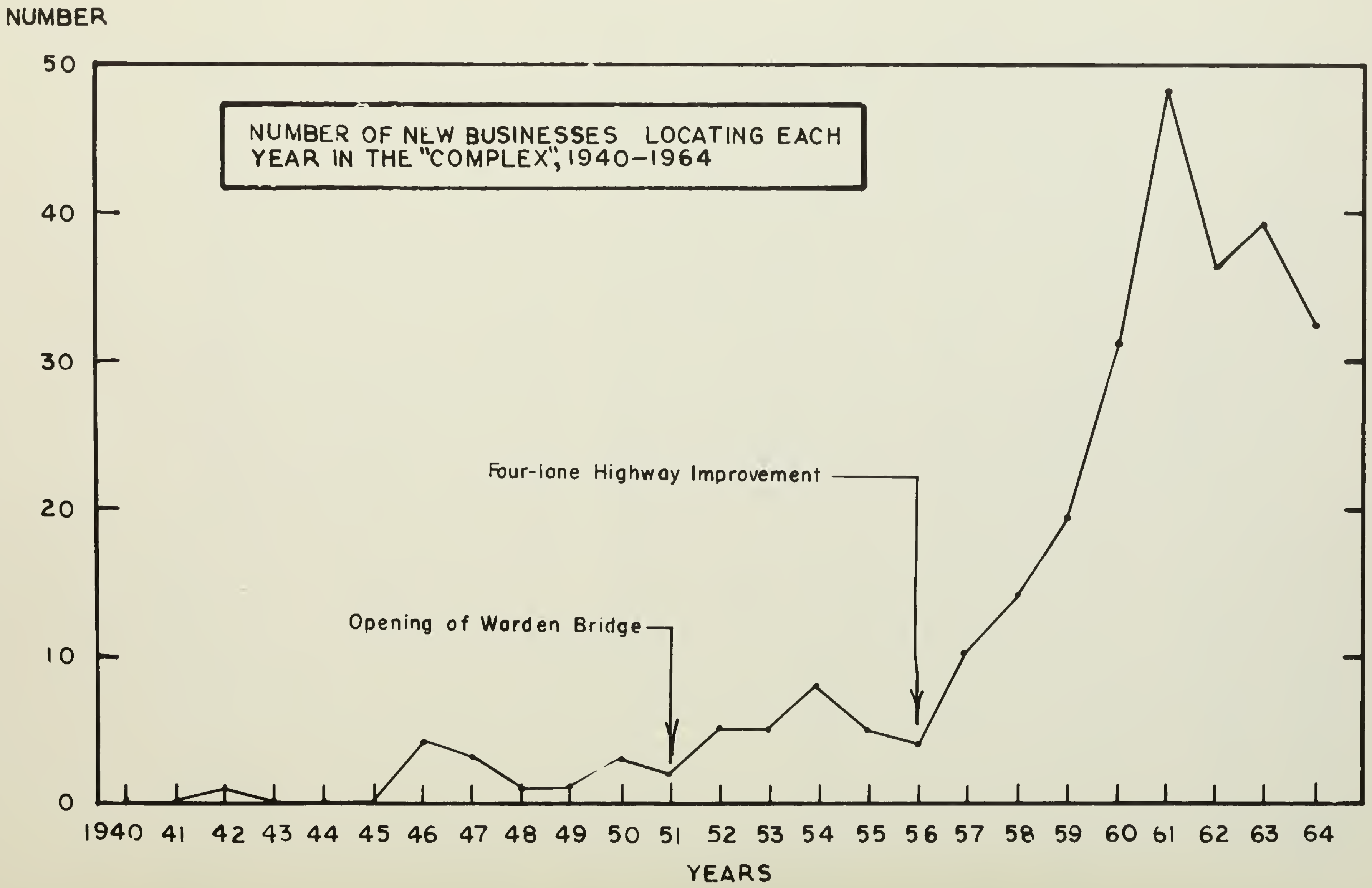
With the opening of the O. S. Warden Bridge in 1951, firms locating within the Complex increased so that in the five years between 1952 and 1956, 27 establishments were founded. Thus, from 1940 through 1956, only 42 firms had located within the vicinity of Tenth Avenue.

During the year of 1956, the Montana State Highway Department expanded Tenth Avenue into a four-lane highway of 80 feet in width. The center of the highway was marked by an island which not only served to separate the east-west traffic flow but also facilitated the exit of left-bound vehicles with exit parking lanes.

The years immediately following this major highway improvement saw many additional activities locating in the area of Tenth Avenue. The number of additional businesses increased each year from 1957 when 10 were established to 1961, the year of 48 additional establishments. Even in the recent years of 1962-1964, the number of new businesses each year averaged between 32 and 39. Thus, of the 272 land use activities existing in the Complex as of 1964, 84 percent, or 229 establishments, located within the past eight years.

What types of business were predominant in locating in the Complex during these last eight years, i. e., 1957 through 1964? The following summary presents us with this information.

CHART 10



NUMBER OF NEW BUSINESSES LOCATING EACH YEAR IN THE "COMPLEX", 1940–1964

Located in the Complex in the Years 1957 through 1964

Commercial		101
Restaurants	19	
Gasoline Service Stations	17	
Automobile Dealers	14	
Household Trailers (Sales & Service)	5	
Retail Stores (All Types)	46	
Services		84
Medical & Health Services	26	
Financial, Insurance, & Real Estate	20	
Legal. Engineering, & Accounting Service	5	
All Other Services	33	
Residential		23
Apartment Houses	18	
Motels	4	
Trailer Courts	1	
Wholesale & Storage		7
Public & Quasi-Public Bldgs.		6
Non-Manufacturing Industries		5
Manufacturing Industries		3
TOTAL		229

One more point requires consideration. Chart 10, as we saw, presents the years of location of businesses between 1940 and 1964. Consequently, the Great Falls Terminal Warehouse, which was established in 1910, has been omitted since it was outside the time period of our analysis.

B. Facilities Expansion

The following summary shows the different types of land use which have expanded their facilities since locating in the Complex. The broad types of business classification as defined in Appendix 4, gives us an idea of the dominant businesses that were prominent in expansion.

Expansion of Facilities in the Complex By Types of Land Use Activities

Types of Land Use Activities	Number of Establishments
Services	37
Commercial	15
Residential	9
Manufacturing Industries	2
Non-Manufacturing Industries	2
Public & Quasi-Public Buildings	1
TOTAL	66

Since there are 272 establishments in the Complex, it is evident that 24 percent expanded their facilities. Expansion of facilities can occur in many ways, e.g., an addition to a retail store to provide more sales area or inventory space, the addition of another office to a clinic, enlargement of a restaurant's quarters, or perhaps an addition to a gasoline service station.

Businesses which fall under the broad type of either Services or Commercial have expanded their facilities more often. In fact, 80% of the total number of expansions in the Complex are accounted for by these two classifications. Services alone was responsible for over one-half of the total (57%) and Commercial contributed nearly one-fourth (23%).

The following definitions list the establishments which make these high percentages possible.

> SERVICES includes those classified as personal; business; financial, insurance and real estate; medical and health; legal, engineering, and accounting; etc.
>
> COMMERCIAL includes retail outlets (all types), eating and drinking establishments, auto dealers, gasoline service stations, and household trailers (sales and service).
>
> RESIDENTIAL includes motels, trailer courts, apartment houses, and single houses.

C. New Business vs. Transfer of Established Business

1. Of the 272 businesses within the Complex, how many originated there and how many relocated in the Tenth Avenue vicinity from another place of activity? 162 businesses, or 60% of the establishments as of 1964, can be viewed as "new" business since they had no previous location; 110 businesses, or 40%, were establishments who relocated into the Complex.

2. From what former locations did these establishments transfer? Where did they come from? It is possible for an established business to transfer into the Complex from three sources, namely:

   a. From elsewhere in the City of Great Falls
   b. From another city in the state of Montana
   c. From another state

All transferred establishments, except two, relocated from some other address in the City of Great Falls. Two businesses are recorded as transferring from another city outside of Great Falls but relocating from other cities in Montana. There were no establishments transferring from another state.

3. What types of activities considered it advantageous to relocate or transfer into the Complex? The following summary answers this question via the utilization of types of land use activities.

Relocation of Establishments By Types of Land Use Activities

Types of Land Use Activities	Number of Establishments
Services	55
Commercial	38
Public & Quasi-Public Buildings	6
Wholesale and Storage	5
Residential	3
Manufacturing Industries	2
Non-Manufacturing Industries	1
Total	110

Services accounts for 50 percent of the transferred establishments; Commercial for 35 percent.

4. In which of the twelve (12) areas of the Complex did these transferred establishments settle? The significant areas are listed below with their respective share of the total relocations.

a. Area #8 (20th-30th St., South Side) 28%
b. Area #6 (13th-20th St., South Side) 19%
c. Area #7 (20th-30th St., North Side) 15%

The remaining 38 percent is fairly well distributed among the other eight areas, except for Area #12 which is a highly undeveloped part of the Complex. Thus, it is seen that the majority, or 62 percent, of the transferred establishments have relocated in the Complex between 13th and 30th Street.

IV. LOCATION ADVANTAGES, LEGAL ORGANIZATIONS, AND ADVERTISING OF TENTH AVENUE BUSINESS

A. Location Advantages

In the interviewing of operating businesses serving customers in the Tenth Avenue Business Complex, a survey analysis sheet was used which asked, among other questions, "*Do you consider this location advantageous over others in Great Falls?*"

Out of a total of 269 interviews of operating businesses serving consumers, 83 percent, or 223 businesses, stated that they considered their Tenth Avenue South location had an advantage over others in Great Falls. The responses as to why they considered their location advantageous over others are listed in the following summary.

1.	More accessible than other city locations	152
2.	More parking for customers and employees	148
3.	Free parking	121
4.	More traffic (customer and automobile)	123
5.	Space for expansion	94
6.	Shifting population center	80
7.	Lower rent	14
8.	Other	38

The figures to the right of the list of responses represent the number of times that particular reason or explanation was given. The total of all the responses is of no significance since the businesses interviewed were permitted to give more than one reason. Some businesses gave only one reason while others gave as many as 4 and 5 reasons.

The most popular explanation given was that in their opinion they believed that their Tenth Avenue South location is "more easily accessible for customers than other city locations." This reason was given by 68 percent of the businesses interviewed.

In addition, and almost as significant, the area's location advantages were expressed in terms of "more parking," "more customer and automobile traffic," and "free parking." Of the businesses interviewed, these three reasons were stated by 66%, 55% and 54%, respectively.

Of further significance is the fact that future business needs were considered in locating in the Tenth Avenue South area since 94 of the businesses interviewed mentioned that they had a location advantage by means of "space for expansion." Also 80 of the businesses interviewed had considered the "shifting population center" of Great Falls in locating their operation in the Tenth Avenue South area.

B. Legal Organizations

The next area to be considered concerns the types of legal ownership of businesses located in the Tenth Avenue South area. Type of legal ownership is divided into five separate classes: sole proprietorship, partnership, corporation, federal and state. The federal ownership is represented by the Bureau of Internal Revenue office, and state ownership is present in the Complex through the state-controlled liquor store and driver license bureau.

Immediately following is a summary of the types of legal ownership and their relationship to one another. It is readily apparent that the sole proprietorship form represents slightly more than one-half (50.8%) of the businesses while the corporation accounts for about one-third (33.5%). Partnerships with 14.5% of the businesses is the third most important type of legal ownership.

Types of Legal Ownership	Number	Percent
Sole Proprietorship	139	50.8%
Partnership	40	14.5%
Corporation	92	33.5%
Federal	1	.4%
State	2	.8%
Total	274	100.0%

In order to determine the areas of business operation in which these types of legal ownership are important, a summary by the Land Use Activities Code (see Chapter VII and Appendix 4) was prepared.

Land Use	Types of Legal Ownership					
Activities	Proprietorship	Partnership	Corporation	Federal	State	TOTAL
Residential	27	4	9	0	0	40
Manufacturing	2	0	1	0	0	3
Non-Manufacturing	0	0	5	0	0	5
Commercial	58	16	46	0	2	122
Wholesale & Storage	2	2	4	0	0	8
Services	50	18	22	1	0	91
Pub. & Quasi-Pub. Bldgs.	0	0	4	0	0	4
Pub. & Quasi-Pub. Op. Sp.	0	0	1	0	0	1
Open Space	0	0	0	0	0	0
TOTAL	139	40	92	1	2	274

From the above summary one can observe the dominant types of activities in the Complex, namely Commercial and Services as well as the kind of legal ownership that prevails in these two important business areas.

Commercial types of business account for 42% of the proprietorships existing in the Complex, 40% of the partnerships, and 50% of the corporations. On the other hand, Services make up 36% of the proprietorships, 45% of the partnerships and 24% of the corporations.

C. Advertising and Location Advantage

Since location of a business operation in the Tenth Avenue South area was anticipated as being an advantage, a question was inserted on the survey analysis sheet used in interviewing which asked "*Do you mention the advantage of your location in your advertising*?"

One hundred and fifty (150) businesses do *not* advertise their location in the Tenth Avenue South area as an advantage, and hence of benefit to customers; 79 do.

V. BUILDING PERMITS: A MEASURE OF COMMERCIAL DEVELOPMENT

A. Source and Explanation of Building Permit Valuations for the City of Great Falls: 1940-1964

The office of the Building Inspector of the City of Great Falls maintains a numerical listing of all building permits issued for new construction, expansions, modernizations, etc. In addition to a numerical sequence of building permits, they are also shown in the record in chronological order.

The information recorded in the Building Permit Register shows the following for each building permit:

Permit number
Date

Name
Number and Street or Avenue

Lot
Block

Addition
Use

Type of Construction
Valuation

Of importance to us in this study are the number and valuation of building permits by years both for the City of Great Falls and for the Tenth Avenue Business Complex. A page by page review of the Building Permit Register from 1940 through 1964 was undertaken and complete data was recorded for each permit granted in the physical area of the Complex. In this manner, building permit data for the Tenth Avenue Business Complex was developed which enables the analysis to show by number and valuation for each year a building permit breakdown as follows---

Grand Total
1. Total Business
    a. New Business
    b. Additions to Business
    c. Repairs and Alterations to Business
2. All Other

Since the year 1955, the Building Inspector's office summarizes the number and valuations of building permits granted each year into 24 classifications. Thus, it was possible to construct for city-wide building permits a breakdown comparable to that developed for the Tenth Avenue Business Complex which allowed a year-by-year comparison of Grand Total Valuations, Total Business Valuations, and All Other Valuations. The "All Other" group includes the building permit valuations for residences, public buildings, churches, and many heterogeneous categories.

The Building Inspector's annual analysis of City of Great Falls building permits shows ~~the~~ following classifications.

Breakdown of Building Permit Classifications
for the City of Great Falls

1. New business
2. Additions to business
3. Repairs and alterations to business

4. Residential
5. Additions to residence
6. Repairs and alterations to residence
7. Residential garages, carports, and patios

8. Public building
9. Public school building
10. School repair

11. New church
12. Church additions
13. Church repairs

Miscellaneous

14. Locate residential trailers
15. Additions and repairs to residential garages
16. Residential swimming pool
17. Change and filter house, and cabana
18. Residential fences
19. Shed
20. Raze building
21. Centennial fronts
22. County
23. Buildings to be moved
24. Foundation for house to be moved on

What is the meaning of "valuation," as used by the Building Inspector's office, in the issuance of a building permit?

Since the year 1955, the Building Inspector's office aims to record valuation as the "contract price" less the cost of mechanical installations, such as electrical work and plumbing work. In general, then, the Building Inspector's office believes for the years 1955 to 1964, the valuations reflect "true market cost" less 20% for business or commercial building permits, and less 30% for residential building permits, as of the year of issuance.

These valuations may or may not reflect the cost of "street improvements" (street paving, curbs, and sidewalks). Whether "street improvements" are in the data depends on the section of the city for which the building permit is being secured. Riverview residential area does include these data. On the other hand, the street improvements made on Tenth Avenue South during the year

1963 were put in by the State Highway Department under the Federal highway program, and hence are not reflected in the Tenth Avenue South building permit valuations.

Since the revenue derived from building permit fees has to be sufficient only to cover the expenses of the Building Inspector's office, this office since 1955 has aimed to record permit valuations at a level below "true market value" adequate to accomplish this purpose.

Prior to 1955, "valuations" recorded in the Building Permit Register were based on the "honor system." The valuation recorded was the figure as reported by the builder whether he reported his construction as $3000 or $6000.

B. Building Permit Valuations in the City of Great Falls, 1940-1964

During the past quarter of a century from 1940 to 1964, annual building permit valuations in the City of Great Falls ranged from a low in the war-year of 1942 of $126,899 to a high of $13,139,676 in the year 1960. The year 1963 approached the highest year by having $12,380,808 of building permits issued.

Table 3 at the end of the chapter presents for the City of Great Falls by years from 1940 to 1964 the number and valuation of building permits. Also Chart 11A graphically presents the change by years for the past 25 years. The following summary shows these data by five-year periods, while Chart 11B shows the growth in bar chart form.

Total Building Permit Numbers and Valuations
for City of Great Falls
By Five-Year Periods, 1940-1964

5-Year Periods	Number of Permits	Valuation	Average Value
1940-1944	2,072	$ 3,699,858	$ 1,786
1945-1949	3,671	12,386,896	3,374
1950-1954	4,083	17,787,370	4,356
1955-1959	5,326	44,837,844	8,419
1960-1964	4,479	50,419,900	11,257
TOTAL	19,631	$129,131,868	———

The above summary indicates that the "number" of building permits increased from 1940 through the five-year period of 1955-1959 and decreased in the ensuing time period, 1960-1964. On the other hand, the summary also shows that the "valuation" of building permits increased at a much higher rate from 1940 through the 1960-1964 period. It is manifest that the total valuation and the total number of building permits will not always coincide for a given time period. However, the average value of a building permit increased substantially over the twenty-five years as shown in the summary.

Inasmuch as the Building Inspector's office issues an annual report (since 1955) summarizing the year's operation it was possible to construct the following building permit breakdown.

Building Permits Issued for Business and
All Other Purposes for City of Great Falls, 1955-1964

Purpose Classification	Number of Permits	Valuation	
		$	% of Total
Total Business	1,034	$22,609,678	23%
New Business	296	15,123,438	16%
Additions	267	4,089,120	4%
Repair and Renewals	471	3,397,120	3%
All Other	8,771	72,648,066	77%
Grand Total	9,805	$95,257,744	100%

The above 1955-1964 building permit summary into a purpose classification has important implications which will be utilized later in the chapter when a comparison is made between the City and the Tenth Avenue Business Complex. However, it can be stated at this time that on a city-wide basis Total Business permits are not as important, in terms of valuation, as the All Other (residential, public buildings, etc.). This is evident from the 23% figure for Total Business and the 77% for All Other.

C. Building Permit Valuations in the Tenth Avenue Business Complex, 1940-1964

1. Growth of Tenth Avenue South

In 1940, Tenth Avenue South was a highly undeveloped area consisting primarily of open space marked by the presence of an occasional residence. The annual valuations of total building permits from 1940 to 1945 were only a few thousand dollars each year. In brief, they were as follows:

1940	$2,460
1941	3,325
1942	1,300
1943	525
1944	1,940
1945	4,900

The year 1946 was the first year of reasonably substantial building permit issuance in the Complex. In that year, the total valuation of

CHART IIA

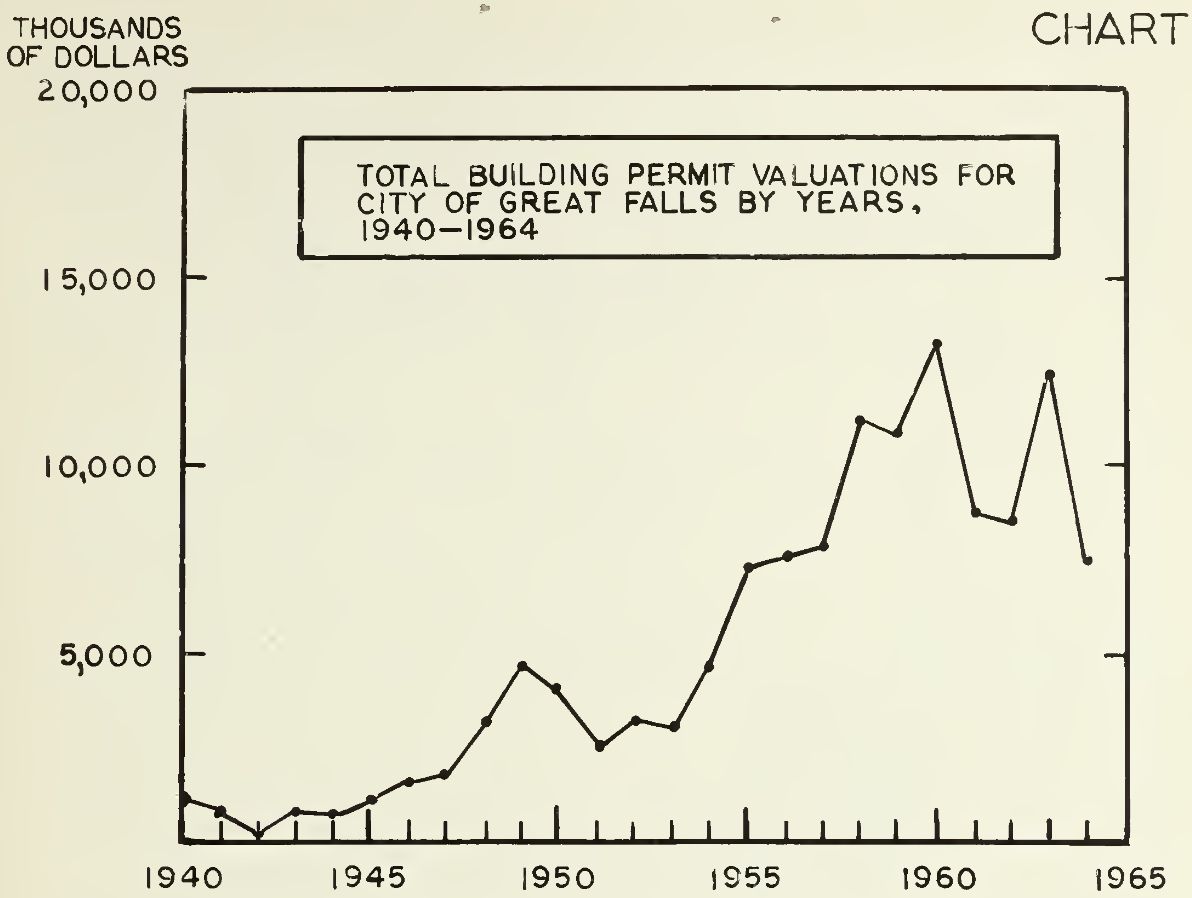
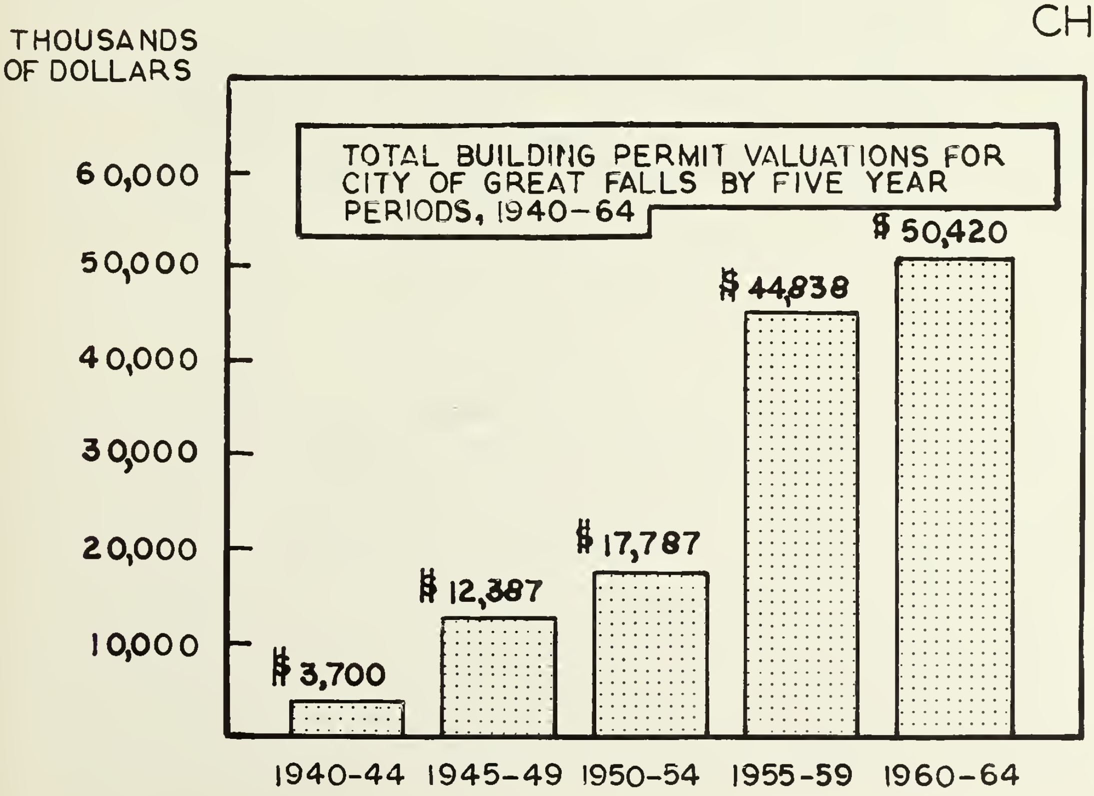


CHART IIB



building permits issued for Tenth Avenue was $147,825 and these were issued for 30 residences. In the succeeding years through 1952, the annual total building permit valuations were markedly higher but very modest in comparison to building permit valuation issued in recent years. The higher level of permits issued from 1947 through 1952 were as follows:

1947	$45,550
1948	42,825
1949	13,850
1950	18,380
1951	42,650
1952	97,450

Beginning with the year 1951, the building permits issued for the Complex began to reflect permits issued for Business purposes. Table 4 at the end of the chapter shows by years the details of building permits issued for the Tenth Avenue Business Complex. In this table, the year-by-year comparison from 1951 to 1964 of permits issued for Business purposes with the permits issued for all purposes sets forth emphatically the importance of building permits issued for Business purposes in the Complex.

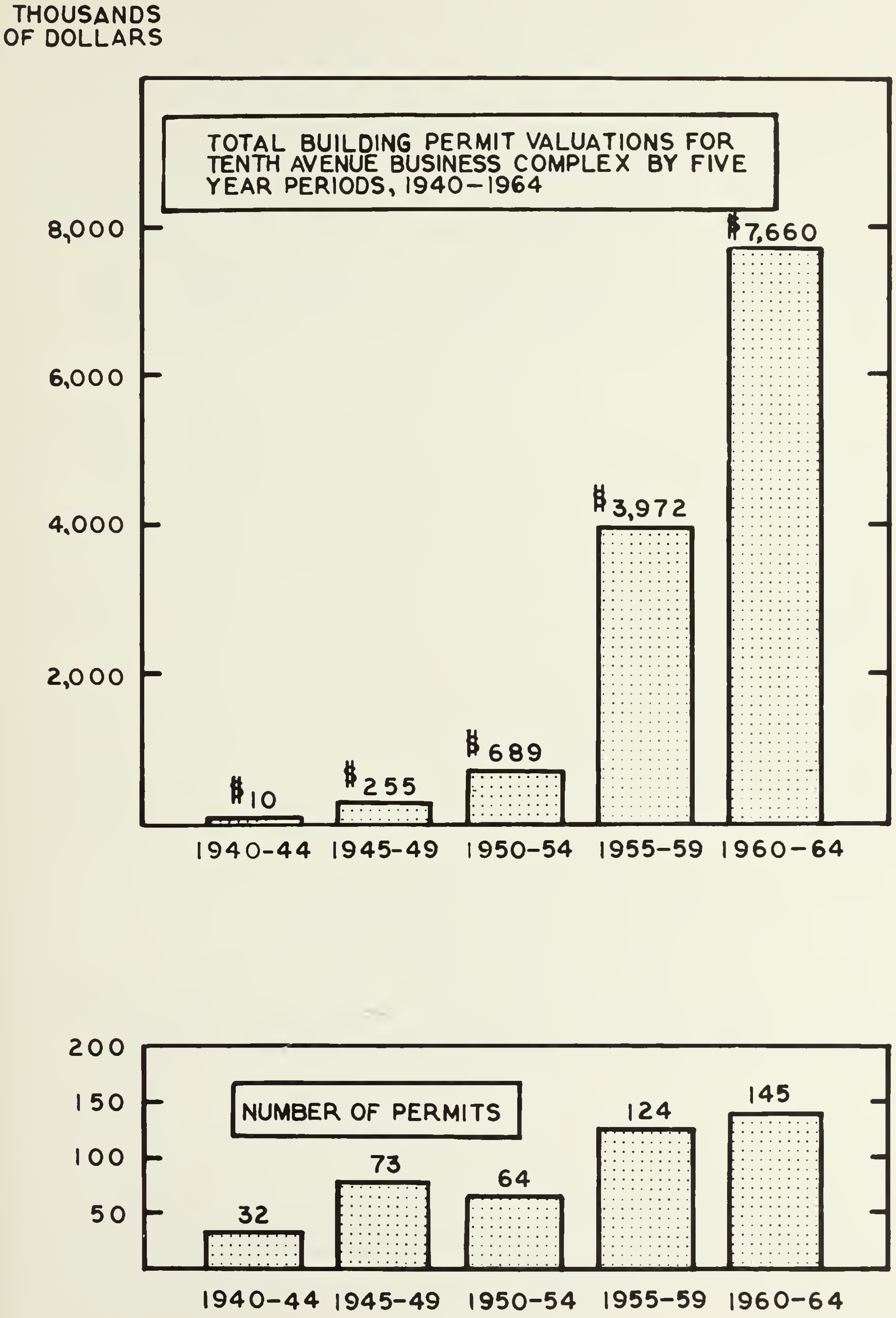
The following summary shows by five-year periods from 1940 to 1964 the total number and valuation of building permits issued for the Tenth Avenue Business Complex. Chart 12 shows this growth of the Complex in bar chart form.

Total Building Permit Number
and Valuation for Tenth Avenue Business Complex
By Five-Year Periods, 1940-1964

5-Year Periods	Number of Permits	Valuation	Average Value
1940-1944	32	$ 9,550	$ 298
1945-1949	73	254,950	3,492
1950-1954	64	688,930	10,765
1955-1959	124	3,971,885	32,031
1960-1964	145	7,660,223	52,829
Total	438	$12,585,538	———

Since we are interested in analyzing the business impact of changes in Tenth Avenue South, the accompanying summary shows us the importance of building permits issued for Business purposes and All Other purposes for the periods 1940-1964 and 1955-1964. During the twenty-five year period, 57% of the valuations of building permits issued for the Complex were for Business purposes while only 43% were for All Other purposes. Since Additions to Business and Repairs and Alterations to Business represented only 5% and 1%, respectively, of the 57% for Business purposes, then the major portion, 51%, represented building permits issued for

CHART 12


THOUSANDS OF DOLLARS
TOTAL BUILDING PERMIT VALUATIONS FOR TENTH AVENUE BUSINESS COMPLEX BY FIVE YEAR PERIODS, 1940-1964
8,000
6,000
4,000
2,000
$10
$255
$689
$3,972
$7,660
1940-44
1945-49
1950-54
1955-59
1960-64
NUMBER OF PERMITS
200
150
100
50
32
73
64
124
145
1940-44
1945-49
1950-54
1955-59
1960-64

New Businesses. In view of our preceding discussion, building permits issued for New Business were particularly prominent from 1951 through 1964.

(thousands of dollars)

Building Permits Issued for Business and
All Other Purposes for Tenth Avenue Business Complex
1940-1964 and 1955-1964

Purpose Classification	1940-1964 Number of Permits	Valuation $	% of TOTAL	1955-1964 Number of Permits	Valuation $	% of TOTAL
Total Business	325	$ 7,180	57%	250	$ 6,469	56%
New Business	143	6,387	51	115	5,757	50
Additions	132	618	5	97	551	5
Repairs and Alterations	50	175	1	38	161	1
All Other	113	5,405	43%	19	5,163	44%
Grand Total	438	$12,586	100%	269	$11,632	100%

2. Comparison of Tenth Avenue Business Complex and City of Great Falls

A comparison of the total building permits issued for the Tenth Avenue Business Complex with the total issued for the entire city during the past twenty-five years indicates quite effectively that Tenth Avenue South has become a more important part of the city with the passing years.

The accompanying summary shows the increasing percents of building permits issued going to Tenth Avenue South. While in the five-year period, 1940-1944, Tenth Avenue South had only 0.3% of the total building permits issued, this relationship increased to 15% in the latest five-year period, 1960-1964.

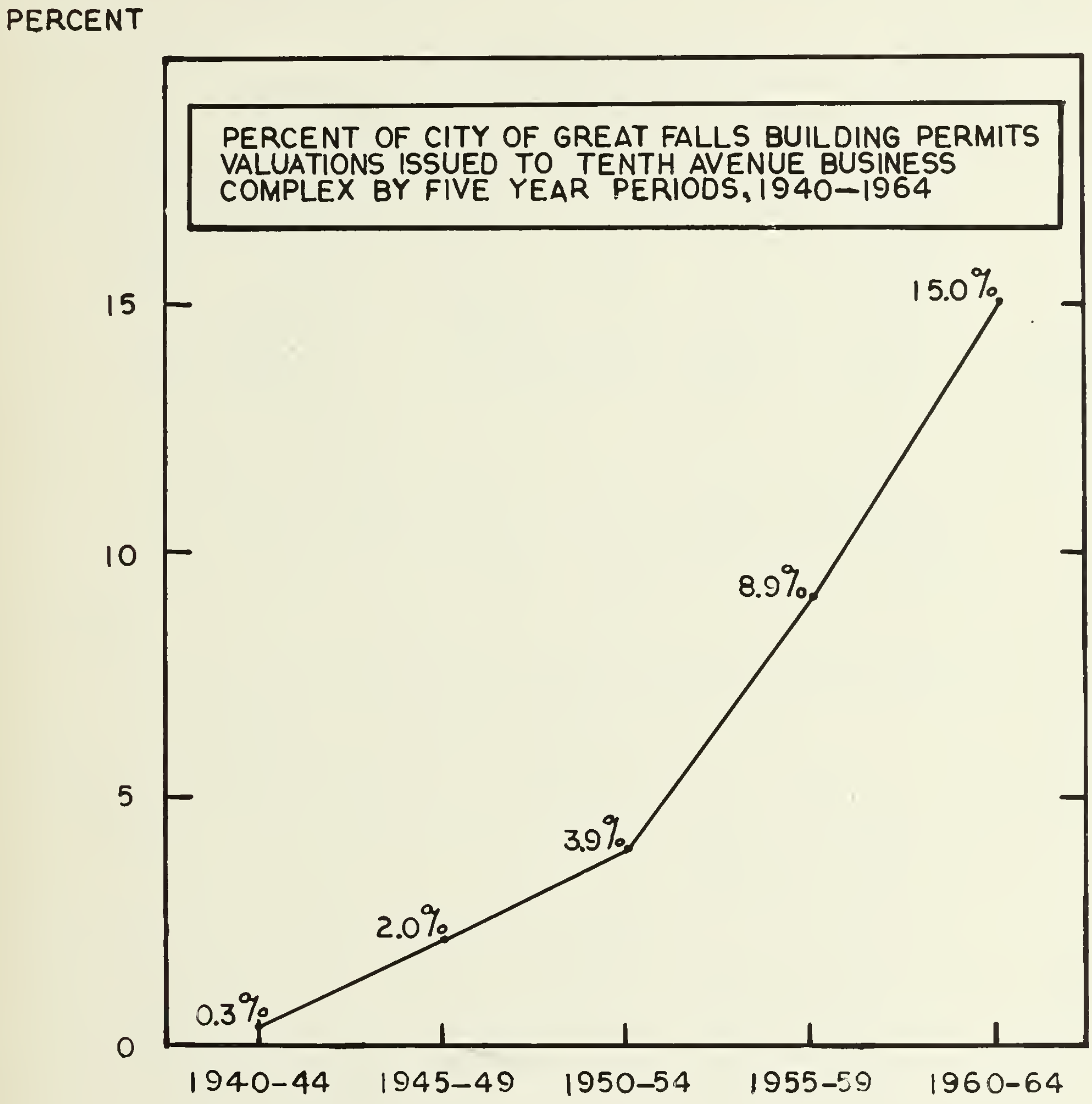
(thousands of dollars)

Percent Relationship of Total Building Permit
Valuations of the City of Great Falls and the
Tenth Avenue Business Complex
By Five-Year Periods, 1940-1964

5-Year Periods	City of Great Falls	Tenth Avenue Business Complex	%
1940-1944	$ 3,700	$ 10	0.3%
1945-1949	12,653	255	2.0
1950-1954	17,762	689	3.9
1955-1959	44,838	3,972	8.9
1960-1964	$ 50,420	$ 7,660	15.0%

This relationship of the increase in importance of building construction in the Tenth Avenue area in comparison to the entire city is shown graphically in Chart 13.

CHART 13


PERCENT
PERCENT OF CITY OF GREAT FALLS BUILDING PERMITS VALUATIONS ISSUED TO TENTH AVENUE BUSINESS COMPLEX BY FIVE YEAR PERIODS, 1940—1964
15
10
5
0
0.3%
2.0%
3.9%
8.9%
15.0%
1940-44
1945-49
1950-54
1955-59
1960-64

Another type of comparison between the City of Great Falls and the Tenth Avenue Business Complex that can be made is to show the building permits issued for each by Purpose Classification for the period, 1955-1964. It is necessary to confine our comparison to the 1955-1964 time period because comparable building permit data for the City of Great Falls are available only for these years.

(thousands of dollars)

Building Permits by Purpose Classification for
City of Great Falls and Tenth Avenue Business Complex,
1955-1964

Purpose Classification	City of Great Falls			Tenth Avenue Business Complex		
	Number of Permits	Valuation		Number of Permits	Valuation	
		$	% of TOTAL		$	% of TOTAL
Total Business	1,034	$22,610	23%	250	$ 6,369	56%
New Business	296	15,124	16	115	5,757	50
Additions	267	4,089	4	97	551	5
Repairs and Alterations	471	3,397	3	38	161	1
All Other	8,771	$72,648	77%	19	$ 5,163	44%
Grand Total	9,805	$95,258	100%	269	$ 11,632	100%

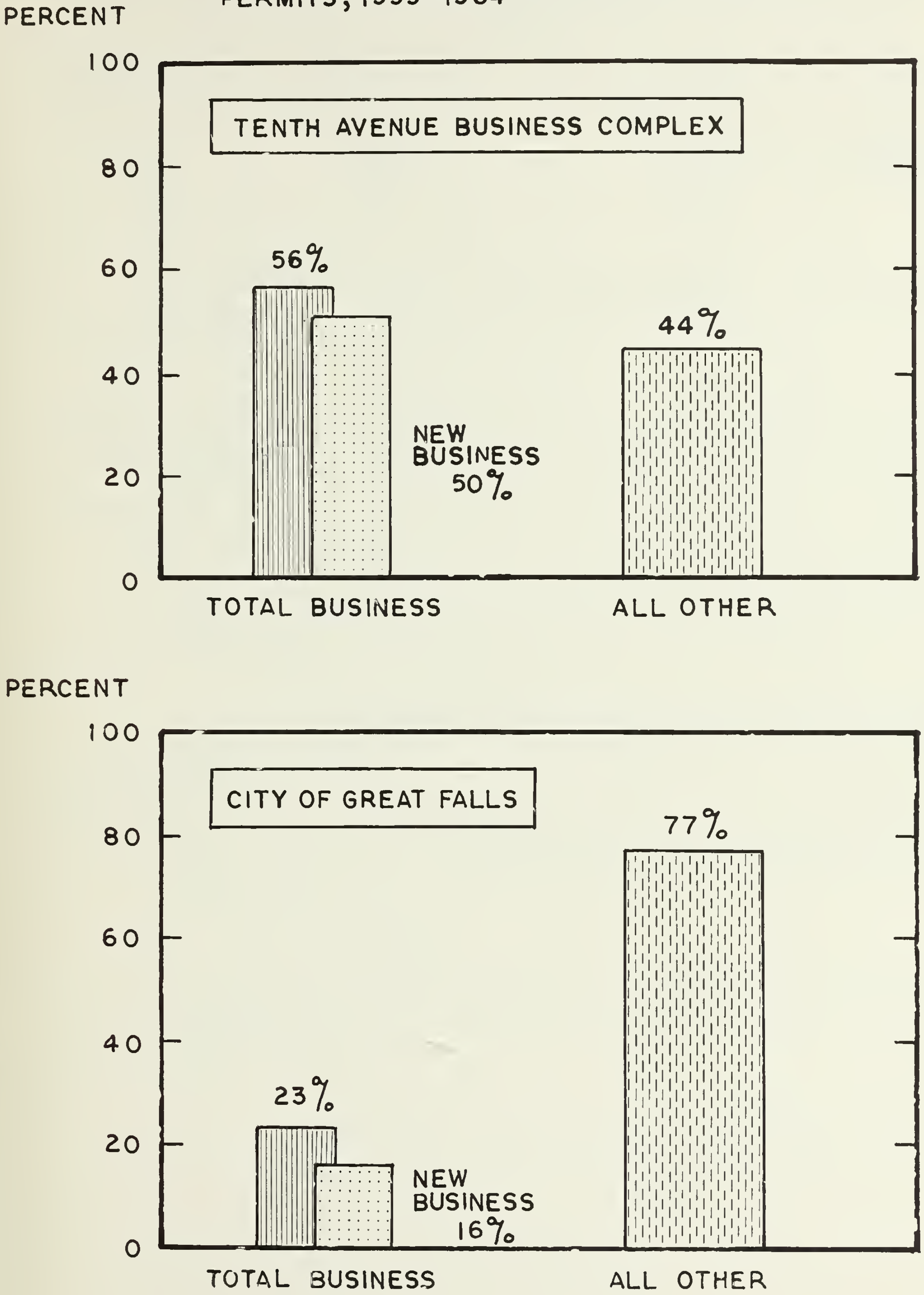
The above summary shows three important facts, namely: (1) 77% of the total building permit valuation of the city is accounted for by the All Other classification; (2) 56% of the total building permit valuation of the Complex comes from Total Business; and (3) of this 56% for Total Business in the Complex, 50% is provided by New Business valuation. Chart 14 graphically presents these relationships.

It is clear that residential building permits and the like are the major influence on the city's total building permit valuation. On the other hand, the acquisition of building permits for new businesses on Tenth Avenue provides the major influence on the Complex's total building permit valuation. Hence, the growth of the Tenth Avenue Business Complex is manifested by the New Business building permit valuation in the 1955-1964 period.

The comparison between the City of Great Falls and the Tenth Avenue Business Complex can be narrowed down even more. The following summary shows the percent relationship of building permits by Purpose Classification which the Complex accounts for in the city during the period, 1955-1964.

CHART 14

PURPOSE CLASSIFICATION OF BUILDING PERMITS, 1955—1964



(thousands of dollars)

Percent Relationship of Building Permits By Purpose Classification
for City of Great Falls and Tenth Avenue Business Complex
1955-1964

Purpose Classification	City of Great Falls	Tenth Avenue Business Complex	Tenth Avenue as % of City
Total Business	$22,610	$ 6,469	29%
New Business	15,123	5,757	38
Additions	4,089	551	15
Repairs	3,397	161	6
All Other	72,648	5,163	7
Grand Total	$95,258	$ 11,632	12%

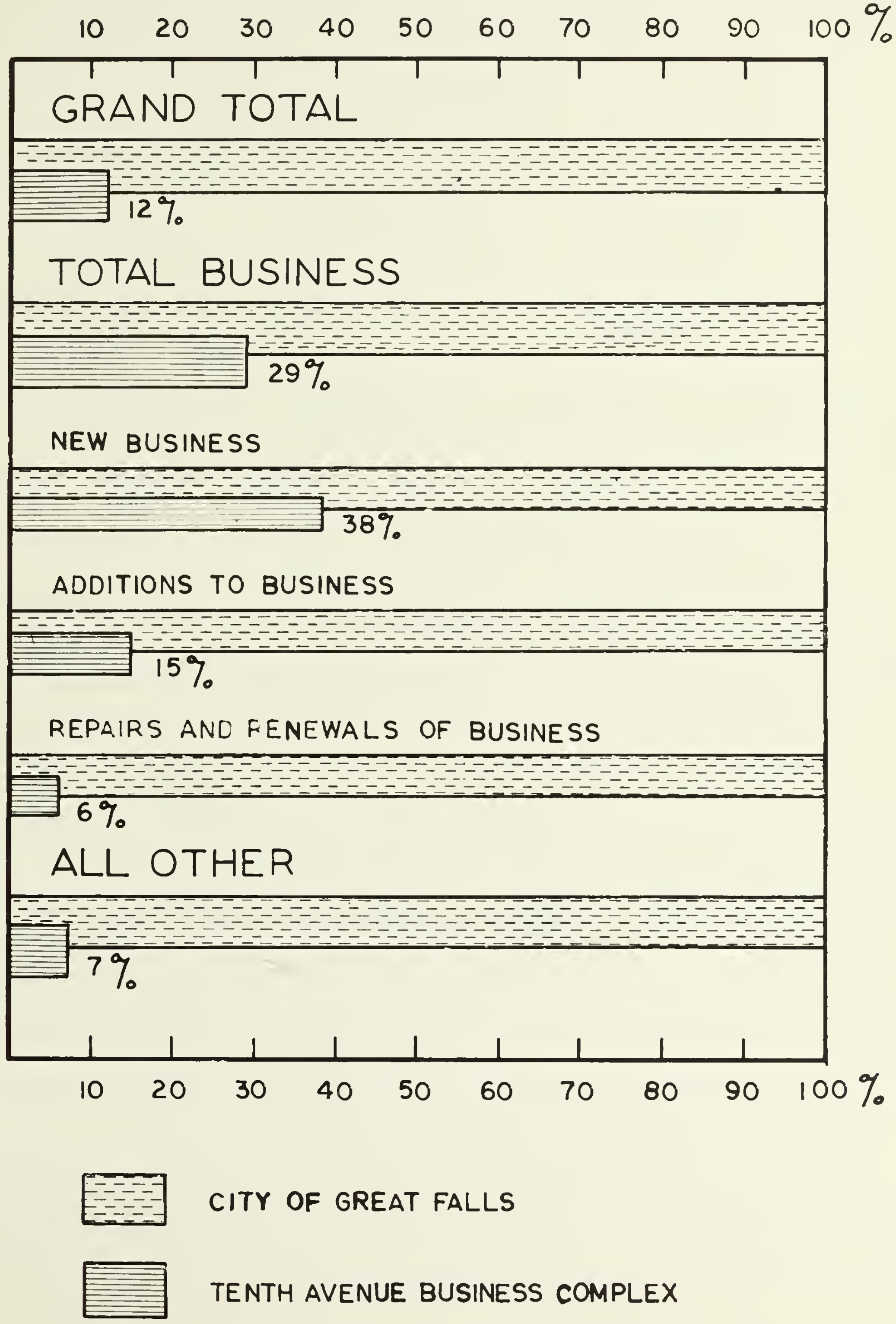
The above summary and Chart 15 show the important role that the Tenth Avenue Business Complex plays in the Total Business building permit valuation of the City of Great Falls. Even more significant than the Total Business figure (29%) is the 38% relationship of the permits issued for the New Business. Thus it can be stated that more than one-third of the New Business building permit valuation in the city during 1955-1964 is accounted for by the Complex. Although the All Other valuation is significant within the Complex, it is negligible when compared to the city, as exemplified by the 7%.

3. Influence of "Business" Building Permit Valuations

It has been established that "business" building permit valuations account for the Tenth Avenue Business Complex's largest percent of the "total" building permit valuations in the City of Great Falls. The following analysis shows this percentage for the years, 1955-1964.

CHART 15

PERCENT RELATIONSHIP OF BUILDING PERMITS, 1955—1964



(thousands of dollars)

Percent Relationship of "Business" Building Permits for City of Great Falls and Tenth Avenue Business Complex by Years, 1955-1964

Years	City of Great Falls	Tenth Ave. Business Complex	Tenth Ave. as % of City
1940-1944	N. A.*	$ 4	--
1945-1949	N. A.	68	--
1950	N. A.	3	--
51	N. A.	34	--
52	N. A.	94	--
53	N. A.	276	--
54	N. A.	232	--
Five-Year Total	N. A.	$ 639	--
1955	$ 1,360	125	9%
56	1,246	156	12
57	1,569	371	24
58	3,757	497	13
59	1,911	1,066	56
Five-Year Total	$ 9,842	$ 2,214	22
1960	$ 2,277	$ 540	24
61	2,712	646	24
62	2,493	1,620	65
63	4,310	1,009	23
64	975	440	45
Five-Year Total	$12,768	$ 4,255	33
TOTAL (1955-1964)	$22,610	$ 6,469	29%

*N.A. Not Available

This summary shows that the Tenth Avenue Business Complex contributed a substantial 22% of the "Business" building permit valuation of the City of Great Falls during the 1955-1959 period. Nearly one-fourth of the business valuation in 1957 was accounted for by Tenth Avenue. But of special significance during this five-year span is 1959, the year in which the Complex accounted for over one-half of the business permit valuation of the city. The number of New Business permits increased considerably that year and were mainly responsible for the 56% figure. Under this classification were such substantial business permit valuations as: Buttrey's Inc. food store, initial construction on the Holiday Village shopping center, the Skyway Bowl, and a Phillips 66 service station.

Total Business building permits continued their rapid growth into the next five-year period, 1960-1964. Tenth Avenue's percentage of the Total Business permit valuation of the city increased to 33% during these five years. In other words, one-third of the Total Business permit valuation of the city was accounted for by Tenth Avenue.

The percent relationship for the Complex as part of the City of Great Falls never dropped below 23% in the years following 1959. As can be observed in the above table, the years 1960, 1961 and 1963 are nearly identical. 1962 is the most significant year of this period, since the Complex obtained 65% of the business permit valuations of the city. Further "New Business" permit valuations by the Holiday Village shopping center was the most influential factor. Also, "New Business" permit valuations such as the Mather Building and the Great Falls Federal Savings and Loan Association Building contributed significantly to this year's high percent. While "Business" permit valuations dropped considerably in the entire city in 1964, the decline was not as drastic in the Complex. This is evident from the fact that Tenth Avenue accounted for 45% of the business permit valuations of the city in 1964.

4. Influence of "All Other" Building Permit Valuations

During the early years of the Tenth Avenue Business Complex, the "All Other" building permit valuations quite naturally played a dominant role. General business activity was low and Tenth Avenue South was mainly residential. However, after 1951, new businesses increased steadily so that "Total Business" building permit valuations became most important. It is true that the "All Other" valuation has remained high but this is due to several large "individual" building permits secured under this classification. First, the construction of the College of Great Falls at its new site on Tenth Avenue in 1959 contributed $1,700,000 to the All Other permit valuation. Secondly, the addition of a recreation center to this college in 1964 accounted for $1,150,000. Finally, the building permit for the new Deaconess Hospital contributed $2,200,000 in 1963. If we remove these data from their respective five-year time periods, All Other building permit valuations as a percent of Total building permits for the Complex is reduced to 1% for 1955-1959, and less than 1% for 1960-1964.

These relationships are set forth in the following summary.

(thousands of dollars)

Percent Relationship of "All Other" and
"Total" Building Permits for Tenth Avenue Business Complex
By Five-Year Periods 1940-1964

5-Year Periods	Total	All Other	All Other as % of Total
1940-1944	$ 10	$ 5	50%
1945-1949	255	187	73
1950-1954	689	50	7
1955-1959	3,972	1,758	44 (1%) [a/]
1960-1964	7,660	3,406	44 (less than 1%) [b/]
TOTAL	$12,586	$5,405	43 (3%)

[a/] College of Great Falls, $1,700,000 in 1959. Elimination of this valuation reduces the All Other relationship to 1%.

[b/] College of Great Falls Recreation Center, $1,150,000 in 1964. Deaconess Hospital, $2,200,000 in 1963. Elimination of these valuation data reduces the All Other relationship to less than 1%.

D. Area Analysis Within the Tenth Avenue Business Complex

Section B of Chapter I which is titled Concept and Characteristics of Tenth Avenue Business Complex and Its Areas sets forth the geographic description of the division of Tenth Avenue into 12 areas. At this point, let us review briefly this block structure which is essential to our area analysis.

Tenth Avenue itself is the dividing line for classifying areas as either north side or south side. Next, the Complex is divided east and west by 9th, 13th, 20th, 30th, and 38th streets. Since the Complex begins at 3rd Street and terminates at the city line, we arrive at 12 areas; for example, Area #1 is from 3rd to 9th Street on the north side of Tenth Avenue and Area #2 is from 4th to 9th Street on the south side of Tenth Avenue, etc. We will also think of the western half of the Complex as 3rd to 30th Street and the eastern half as 30th Street to the city line.

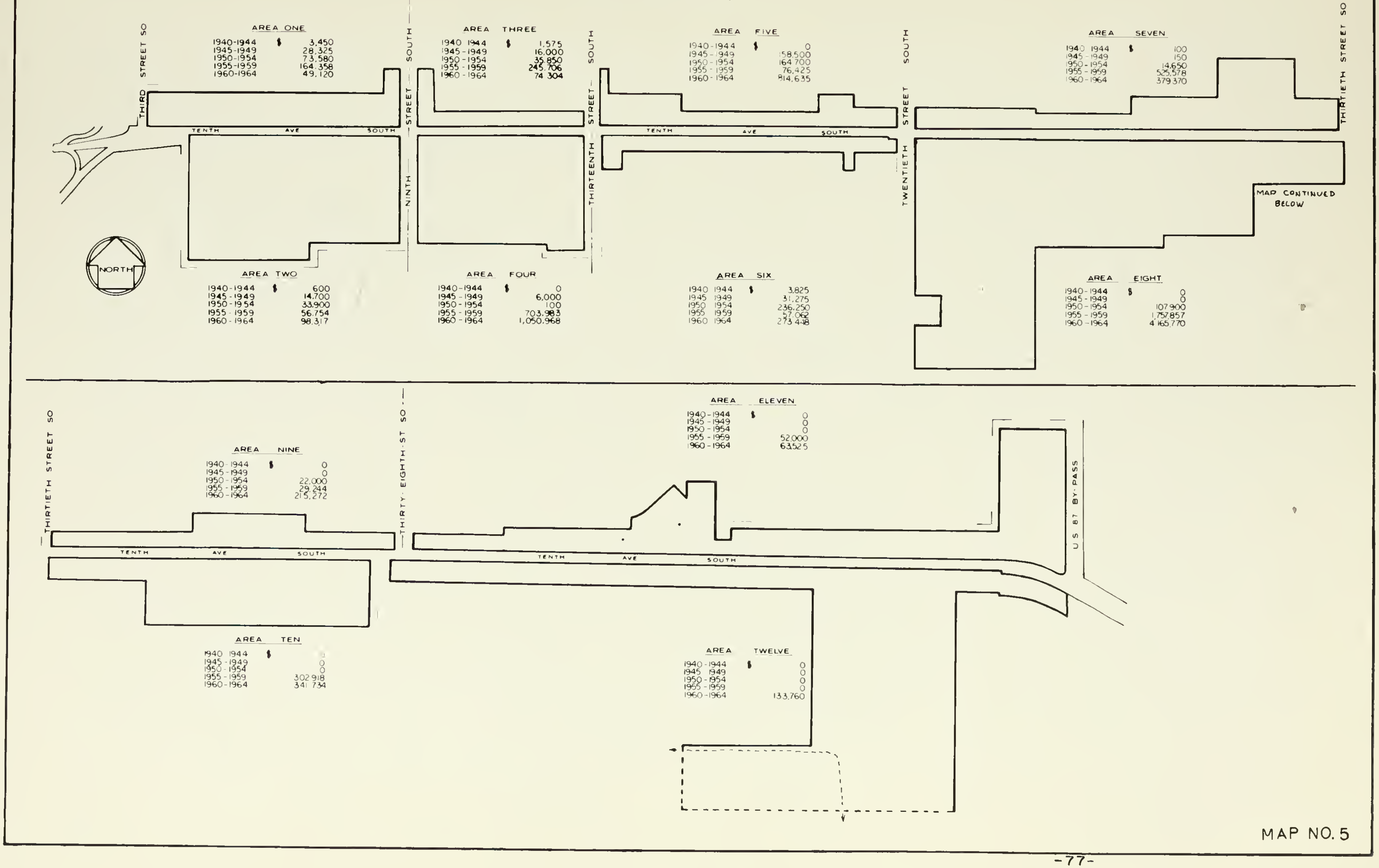
By this procedure, the Complex has been divided into 12 logical areas for individual study and comparison. The locations of these areas are readily available by turning to the map of this section, i.e., Map No. 5--Building Permit Valuations By Areas in the Tenth Avenue Business Complex.

Table 5 at the end of this section shows by five-year periods the Grand Total permit valuation of each of the areas into which the Complex is divided. Also, Table 6 shows by areas for each five-year period a breakdown of the Grand Total permit valuation into Business and All Other valuations.

We have seen earlier that building permits activity was low in the 1940-1944

BUILDING PERMIT VALUATIONS BY AREAS

IN THE TENTH AVENUE BUSINESS COMPLEX
BY FIVE-YEAR PERIODS, 1940-1964



MAP NO. 5

period; however, what activity there was, found itself concentrated in the western half of Tenth Avenue, namely Area #1, $3,450; Area #3, $1,575; and Area #6 with $3,825. All Other valuation predominated in this period.

Similar to the preceding period, building permits during 1945-1949 remained in the western half of the Complex. Valuation picked up noticeably on the north side of Tenth Avenue as Area #5 reported the largest Grand Total valuation ($158,500). This figure is composed mainly of All Other permit valuation. It is after 1949 that we observe a change taking place.

In the 1950-1954 period, building permits extended further eastward along Tenth Avenue, reaching Areas #8 and #9 (from 20th to 38th St.). The trend or location of most of the permits and their valuation is still on the north side but the south side of the Avenue is progressing. In fact, the largest single area valuation was on the south side during this period, namely Area #6 with a Grand Total of $236,250 (of which Total Business valuation was $221,400).

Every Area (except #5 and #6 which experienced slight decreases and #12 which did not record any valuation) witnessed a substantial growth in building permit valuation during the 1955-1959 period. Several areas were of special significance and will be discussed. Area #7 had a Grand Total of $525,578, of which Total Business accounted for $522,890. Area #4 recorded a Grand Total of $703,983 with Total Business again responsible for nearly all of this figure, namely $703,183. Finally, Area #8 had a Grand Total valuation of $1,757,857 which is the largest valuation any Area had experienced to date. The large All Other valuation supplied by the College of Great Falls in this area ($1,700,000) was the major impetus to this high figure. The fact that Area #8 is on the south side of Tenth Avenue brings to the fore another trend that accelerated during the 1955-1959 five year period.

During the 1960-1964 period, the south side of Tenth Avenue continued to show a more upward trend in permit valuation than the north side. The two most significant areas on the south side are Areas #4 and #8 which were also highly important before 1960. The Grand Total valuation was equal to the Total Business valuation in Area #4 because there was no All Other valuation. Of this $1,050,968, the Holiday Village shopping center contributed $1,000,000. Area #8 recorded an all-time five-year period high of $4,165,770. The factors which influenced this figure most were: (1) the Deaconess Hospital in 1963 with $2,200,000 and (2) the College of Great Falls in 1964 with $1,150,000.

A look at the north side during this period (1960-1964) shows that Area #5 recorded a very substantial Grand Total figure, namely $814,635. It is interesting to note that all of this total was made up by Total Business permits only with no All Other.

For the time period covered by this research project, we can list the most significant areas in terms of permit valuation. In order of importance, they are: (1) Area #8, $6,031,527; (2) Area #4, $1,761,051; and (3) Area #5, $1,214,260. The following summary shows the relative importance of all the areas.

Total Building Permit Valuations for
Tenth Avenue Business Complex By Area Importance, 1940-1964

Area Number	Building Permit Valuation	Location
8	$ 6,031,527	20th to 30th St. (south side)
4	1,761,051	9th to 13th St. (south side)
5	1,214,260	13th to 20th St. (north side)
7	919,848	20th to 30th St. (north side)
10	644,652	30th to 38th St. (south side)
6	601,860	13th to 20th St. (south side)
3	373,435	9th to 13th St. (north side)
1	318,833	3rd to 9th St. (north side)
9	266,516	30th to 38th St. (north side
2	204,271	3rd to 9th St. (south side)
12	133,760	38th to City Line(south side)
11	115,525	38th to City Line(north side)

Table 3
Number and Valuation of Building Permits for City of Great Falls By Years, 1940-1964

YEARS	GRAND TOTAL		BUSINESS								ALL OTHER	
			TOTAL BUSINESS		New Business		Addition to Business		Repairs & Alterations			
	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation
1940	643	$1,098,430										
1941	514	959,010										
1942	212	126,899										
1943	284	801,703										
1944	419	713,816										
Five-Year Total	2,072	3,699,858										
1945	493	1,003,506										
1946	759	1,610,420										
1947	691	1,801,840										
1948	809	3,152,120										
1949	919	4,819,010										
Five-Year Total	3,671	12,386,896										
1950	1,101	4,038,560										
1951	620	2,768,070										
1952	840	3,236,750										
1953	735	3,031,560										
1954	787	4,712,430										
Five-Year Total	4,083	17,787,370										
1955	930	7,234,193	105	$1,359,672	31	$ 456,026	29	$744,796	45	$158,850	825	$5,874,521
1956	1,009	7,747,695	93	1,245,800	22	324,344	28	674,619	43	246,837	916	6,501,895
1957	913	7,861,480	108	1,568,667	34	1,072,355	22	318,687	52	177,625	805	6,292,813
1958	1,272	11,092,697	131	3,756,926	28	3,018,343	37	315,476	66	423,107	1,141	7,335,771
1959	1,202	10,901,779	129	1,911,017	41	1,449,703	26	164,584	62	296,730	1,073	8,990,762
Five-Year Total	5,326	44,837,844	566	9,842,082	156	6,320,771	142	2,218,162	268	1,303,149	4,760	34,995,762
1960	1,143	13,139,676	108	2,277,330	31	1,644,326	29	382,640	48	250,364	1,035	10,862,346
1961	902	8,779,430	111	2,712,014	34	744,588	30	518,359	47	1,449,067	791	6,067,416
1962	852	8,683,233	99	2,493,381	34	2,177,598	24	205,567	41	110,216	753	6,189,852
1963	817	12,380,808	77	4,310,138	20	3,489,000	22	627,276	35	193,862	740	8,070,670
1964	765	7,436,753	73	974,733	21	747,155	20	137,116	32	90,462	692	6,462,020
Five-Year Total	4,479	50,419,900	468	12,767,596	140	8,802,667	125	1,870,958	203	2,093,971	4,011	37,652,304
GRAND TOTAL	19,631	129,131,868										
Total (1955-1964)	9,805	95,257,744	1,034	22,609,678	296	15,123,438	267	4,089,120	471	3,397,120	8,771	72,648,066

GRAND TOTAL = TOTAL BUSINESS + ALL OTHER

TOTAL BUSINESS = New Business + Additions to Business + Repairs and Alterations to Business

Table 4

Number and Valuation of Building Permits for Tenth Avenue Business Complex By Years, 1940-1964

YEARS	GRAND TOTAL		BUSINESS								ALL OTHER	
			TOTAL BUSINESS		New BUSINESS		Addition to Business		Repairs & Alterations			
	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation	Number of Permits	Valuation
1940	9	$ 2,460	6	$ 1,860	1	$ 1,000	3	$ 560	2	$ 300	3	$ 600
1941	8	3,325	4	625			4	625			4	2,700
1942	6	1,300									6	1,300
1943	4	525	2	350			1	200	1	150	2	175
1944	5	1,940	3	1,550			1	250	2	1,300	2	390
Five-Year Totals	32	9,550	15	4,385	1	1,000	9	1,635	5	1,750	17	5,165
1945	7	4,900	1	500			1	500			6	4,400
1946	31	147,825	1	400			1	400			30	147,425
1947	14	45,550	8	39,100	3	31,500	3	2,600	2	5,000	6	6,450
1948	17	42,825	5	20,000			4	18,000	1	2,000	12	22,825
1949	4	13,850	2	8,350			2	8,350			2	5,500
Five-Year Totals	73	254,950	17	68,350	3	31,500	11	29,850	3	7,000	56	186,600
1950	8	18,380	2	2,900			2	2,900			6	15,480
1951	7	42,650	4	33,500	1	25,000	2	3,500	1	5,000	3	9,150
1952	17	97,450	9	94,200	7	92,000	2	2,200			8	3,250
1953	23	298,200	19	275,750	12	258,500	5	16,700	2	550	4	22,450
1954	9	232,250	9	232,250	4	222,000	4	10,100	1	150		
Five-Year Totals	64	688,930	43	638,600	24	597,500	15	35.400	4	5,700	21	50,330
1955	19	150,710	17	125,210	8	84,778	7	39,232	2	1,200	2	25,500
1956	15	167,363	13	156,205	4	109,230	6	36,475	3	10,500	2	11,158
1957	28	374,383	25	370,663	7	192,068	15	105,995	3	72,600	3	3,720
1958	27	512,632	24	496,544	9	384,564	11	98,980	4	13,000	3	16,088
1959	35	2,766,797	33	1,065,677	19	1,041,167	14	24,510			2	1,701,120
Five-Year Totals	124	3,971,885	112	2,214,299	47	1,811,807	53	305,192	12	97,300	12	1,757,586
1960	28	541,404	27	540,060	11	444,398	12	89,062	4	6,600	1	1,344
1961	37	646,231	37	646,231	21	575,652	10	66,059	6	4,520		
1962	23	1,619,700	23	1,619,700	10	1,572,000	8	38,300	5	9,400		
1963	30	3,208,879	29	1,008,879	17	975,976	7	24,053	5	8,850	1	2,200,000
1964	27	1,644,009	22	439,784	9	376,920	7	28,764	6	34,100	5	1,204,255
Five-Year Totals	145	7,660,223	138	4,254,654	68	3,944,946	44	246,238	26	63,470	7	3,405,569
GRAND TOTALS	438	12,585,538	325	7,180,288	143	6,386,753	132	618,315	50	175,220	113	5,405,250
TOTAL (1955-64)	269	11,632,108	250	6,468,953	115	5,756,753	97	551,430	38	160,770	19	5,163,155

GRAND TOTAL = TOTAL BUSINESS + ALL OTHERS

TOTAL BUSINESS = New Business + Additions to Business + Repairs and Alterations to Business

Table 5
Total Building Permit Valuations for Tenth Avenue Business Complex By Areas, By Five-Year Periods, 1940-1964

NORTH SIDE VALUATIONS

FIVE YEAR PERIODS	AREA # 1 (3rd to 9th St.)	AREA # 3 (9th to 13th St.)	AREA # 5 (13th to 20th St.)	AREA # 7 (20th to 30th St.)	AREA # 9 (30th to 38th St.)	AREA # 11 (38th to City Line)
1940-1944	$ 3,450	$ 1,575	-----	$ 100	-----	------
1945-1949	28,325	16,000	$ 158,500	150	-----	------
1950-1954	73,580	35,850	164,700	14,650	$ 22,000	------
1955-1959	164,358	245,706	76,425	525,578	29,244	$ 52,000
1960-1964	49,120	74,304	814,635	379,370	215,272	63,525
TOTALS	$ 318,833	$ 373,435	$ 1,214,260	$ 919,848	$ 266,516	$ 115,525

SOUTH SIDE VALUATIONS

FIVE YEAR PERIODS	AREA # 2 (3rd to 9th St.)	AREA # 4 (9th to 13th St.)	AREA # 6 (13th to 20th St.)	AREA # 8 (20th to 30th St.)	AREA # 10 (30th to 38th St.)	AREA # 12 (38th to City Line)
1940-1944	$ 600	----	$ 3,825	-----	------	-----
1945-1949	14,700	$ 6,000	31,275	-----	------	-----
1950-1954	33,900	100	236,250	$ 107,900	------	-----
1955-1959	56,754	703,983	57,062	1,757,857 (b)	$ 302,918	-----
1960-1964	98,317	1,050,968 (a)	273,448	4,165,770 (c)	341,734	$ 133,760
TOTALS	$ 204,271	$1,761,051	$ 601,860	$6,031,527	$ 644,652	$ 133,760

(a) Influence of Holiday Shopping Center
$1,050,968
→ 1,000,000
$ 50,968

(b) Influence of College of Great Falls
$ 1,757,857
→ 1,700,000
$ 57,857

(c) Influence of Deaconess Hospital and the College of Great Falls
$2,200,000
1,150,000
$3,350,000

$4,165,770
→ 3,350,000
$ 815,770

Table 6

Total, Business and All Other Building Permit valuations for Tenth Avenue Business Complex By Areas, By Five-Year Periods, 1940-1964

	NORTH SIDE VALUATIONS						SOUTH SIDE VALUATIONS					
	BUSINESS						BUSINESS					
AREAS AND YEARS	TOTAL	NEW	ADDITIONS	REPAIRS & ALTERATIONS	ALL OTHER	GRAND TOTAL	TOTAL	NEW	ADDITIONS	REPAIRS & ALTERATIONS	ALL OTHER	GRAND TOTAL
(3rd to 9th St.)												
1940-1944	$ 3,350	$ 1,000	$ 900	$ 1,450	$ 100	$ 3,450	$ 250		$ 250		$ 350	$ 600
1945-1949	21,000		16,000	5,000	7,325	28,325	3,500		1,500	$2,000	11,200	14,700
1950-1954	52,500	43,000	4,500	5,000	21,080	73,580	32,000	$32,000			1,900	33,900
1955-1959	151,758	13,794	66,964	71,000	12,600	164,358	53,254	34,230	11,024	8,000	3,500	56,754
1960-1964	49,120		39,820	9,300		49,120	98,317	62,000	34,817	1,500		98,317
(9th to 13th St.)												
1940-1944	100			100	1,475	1,575						
1945-1949	8,500	8,500			7,500	16,000	6,000		6,000			6,000
1950-1954	35,150	35,000		150	700	35,850	100		100			100
1955-1959	245,286	187,550	51,736	6,000	420	245,706	703,183	699,408	3,775		800	703,983
1960-1964	72,960	60,000	3,960	9,000	1,344	74,304	1,050,968	1,047,100	3,868			1,050,968
(13th to 20th St.)												
1940-1944							685		485	200	3,140	3,825
1945-1949	13,000	13,000			145,500	158,500	16,350	10,000	6,350		14,925	31,275
1950-1954	164,300	160,000	4,300		400	164,700	221,400	207,000	14,400		14,850	236,250
1955-1959	75,305	61,605	4,200	9,500	1,120	76,425	55,262	41,500	10,962	2,800	1,800	57,062
1960-1964	814,635	814,420	215			814,635	273,448	251,408	19,540	2,500		273,448
(20th to 30th St.)												
1940-1944					100	100						
1945-1949					150	150						
1950-1954	10,750	6,500	3,700	550	3,900	14,650	100,400	100,000	400		7,500	107,900
1955-1959	522,890	458,640	64,250		2,688	525,578	57,857	7,000	50,857		1,700,000	1,757,857
1960-1964	379,370	308,400	62,800	8,170		379,370	815,770	763,860	21,010	30,900	3,350,000	4,165,770
(30th to 38th St.)												
1940-1944												
1945-1949												
1950-1954	22,000	14,000	8,000			22,000						
1955-1959	29,244	29,244				29,244	268,260	233,836	34,424		34,658	302,918
1960-1964	215,272	213,148	2,124			215,272	320,734	260,850	57,784	2,100		341,734
(38th St. to City Line)												
1940-1944												
1945-1949												
1950-1954												
1955-1959	52,000	45,000	7,000			52,000						
1960-1964	30,300	30,000	300		33,225	63,525	133,760	133,760				133,760
TOTALS	2,968,790	2,502,801	340,769	125,220	239,627	3,208,417	4,211,498	3,883,952	277,546	50,000	5,144,623	9,356,121

VI. ASSESSED VALUATION: A MEASURE OF COMMERCIAL DEVELOPMENT

A. The Property Tax in Montana and Its Importance

In Montana the property tax is the most important of all taxes levied. For all units of government---state, county, city, school, etc.---it accounts for over 61 percent of all tax revenues in 1964. 1/

The 1964 property tax dollar collected in the state was distributed to the various governmental units as follows:

The State	5.31%
Counties	26.61
Cities and Towns	12.29
Schools	55.79
	100.00%

The source of the property tax dollar was from the various classes of property subject to the tax. In 1964, the different classes of property and their relative taxable valuations were:

Farm Lands and Improvements	19.17%
Other Real Estate and Improvements	5.50
City and Towns Lots and Improvements	23.50
All Real Estate and Improvements	48.17%
Livestock	5.67%
Personal Property	21.91
Net Proceeds of Mines	5.77
Public Utilities	18.48
	100.00%

The State Board of Equalization reported that for 1964 the assessed valuation of all classes of property in the state was $2,576,400,954 with a taxable valuation of $758,830,999. Thus, taxable value was about 29.4% of the assessed value.

For Cascade County the 1964 assessed valuation for all classes of property was $248,909,990 with a taxable value of $68,375,435 which was about 28% of the assessed value.

1/ Twenty-first Biennial Report of the Montana State Board of Equalization, page 10. All of the state of Montana and Cascade County assessment valuations and tax information used in this report have as their source the biennial reports of the State Board of Equalization

In 1964 the property tax in Cascade County provided $10,671,670 of revenue for the following purposes:

State	$ 461,713
County	2,639,464
School (excluding High School)	4,000,061
High School	1,285,812
Total City and Town	2,163,621
Fire	20,778
Hail Insurance	1,256
Drainage and Irrigation District	85,176
Miscellaneous	13,789

B. History of the Property Tax in Montana

In 1864 the First Legislative Assembly of the Territory of Montana met at Bannock and adopted a general property tax to provide a source of revenue for the territorial government.[1] Inasmuch as land was the chief form of property holding, it bacame the main source of income.

In 1889 the Constitutional Convention at Helena included in the state constitution Article XII which is concerned with revenue and taxation. The Article empowers the Legislative Assembly to levy taxes on property and incomes, and to appropriate amounts not in excess of anticipated revenues. Also, the Article established county and state boards of equalization to equalize the assessed valuations of property.[2]

In 1891 the Second Legislative Assembly of the State of Montana passed a general property tax law patterned after the one of 1864.

In 1919, however, the State Legislative Assembly enacted a law providing for the classification of property. This law is the legal basis of property taxation in Montana. The Classified Property Tax Law recognizes such differences in property as the income-producing power and ease or difficulty of escaping assessment. Over the years many changes have been made in the law.

The current provisions of the law regarding the classification of taxable property are set forth on page 37 in the Twenty-First Biennial Report of the Montana State Board of Equalization.

C. Some Current Aspects of the Property Tax

As revised over the years since 1919, when enacted, the Montana property tax law classifies property into eight classes. These classes were established with varying percentages to be applied to the assessment value in order to determine the taxable value. "Assessment" simply means a dollar valuation of property for purposes of taxation, and in practice this monetary valuation is placed on all property in a classification which is situated in a given taxing jurisdiction.

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[1] Ely, Roy J. W. - A Digest of Taxes for State Purposes in Montana (1959)

[2] The Montana Almanac, 1957, p. 126.

Insofar as this report is concerned, we are mainly interested in the classification of property known as Class Four which includes land and improvements. For this classification, the taxable valuation is 30 percent of assessed value.

For Class Four, the revised Code of Montana reads:

> "All land, town and city lots, with improvements, and all trailers affixed to land owned, leased, or under contract of purchase by the trailer owner, manufacturing and mining machinery, fixtures and supplies, except as otherwise provided by the constitution of Montana, and except as such property may be included in Class Five or Class Seven."

The County Assessor must base the assessment of all lands, city and town lots, and all improvements on the classification and appraisal as made by the Board of County Commissioners through the Reclassification Office, except those assessment duties reserved by the State Board of Equalization which concern the assessment of all intercounty property such as railroads, power line, pipelines, airlines, and telephone lines.

For all Class Four property, the law requires the Board of County Commissioners to establish the true and full value of property. Usually, this true and full value is interpreted to mean the current market or normal value.

In theory, assessments for Class Four properties are made between the first Monday in March and the second Monday in July by the County Assessor. At this point the County Commissioners sit as a board of equalization for the purpose of equalizing the assessment of properties within their respective counties. The assessment rolls, as adjusted and equalized by the County Commissioners, are then transmitted to the State Board of Equalization.

In order to arrive at the assessment valuation of each piece of land and improvement property in Class Four, the County Assessor each year applies 40 percent to the market or normal value, and this figure is recorded on the property valuation books as the assessed value. Once the assessment valuation has been calculated, state law dictates that 30 percent of this figure is the taxable value. It is on the taxable value that the tax rate is applied for the determination of a Class Four property owner's tax bill.

The tax rate of a taxing jurisdiction can change from one tax year to the next. To arrive at the tax rate for a given tax year requires that a taxing jurisdiction establish a budget of expenditures for the next fiscal year. The

Class Four tax rate is found by dividing the expenditure budget by the assessed valuation of all Class Four land and improvement property subject to the tax. Some properties, such as churches, schools, post offices, public buildings, hospitals, and others in related categories, are ordinarily excluded from the assessed valuation in arriving at a tax rate. Also, these categories of property are exempt from the property tax.

D. Sources and Explanations of Assessed Valuations Used in Report

The legal Code in Montana requires the State Board of Equalization to provide for general and uniform methods of classifying lands and appraising city and town lots, rural and urban improvements, and timber lands.

It is the responsibility of the County Board of Commissioners in each county to accomplish in such manner as the State Board of Equalization may direct (a) the classification of all taxable lands, and (b) the appraisal of all taxable city and town lots as well as rural and urban improvements.

The law further requires that a record be kept upon maps, plats and forms and entered in books of record as may be prescribed by the State Board of Equalization. The assessment valuation data used in this report were obtained from the public records maintained in the office of the County Assessor of Cascade County and from the biennial reports of the State Board of Equalization.

The procedure involved in locating and recording the "Assessed Valuation" of all property within the Tenth Avenue Business Complex includes numerous and various activities. In the office of the County Assessor the assessment valuation figures for lots and improvements in the City of Great Falls are recorded in official books titled "Property Valuation." These books present the physical area of the city by block number and lot number. Also, the assessment figures are listed as "Land" and "Improvement" separately. Since all platted property within the city is recorded in this manner, and since the majority of land in the Complex area is within the city limits, a large percentage of the total assessed valuation figures were readily available.

The development of assessment figures for unplatted land presented some problems. Most of the physical area of the Complex is within the city limits and thus platted. However, some land within the Complex but out of the city limits, is unplatted. Also, some areas, presently within the city, were beyond the city boundary and unplatted in many of the years back to 1940, the starting year of our analysis.

Unplatted land is found by its geographical location within the county.

The county is divided into "Townships" and "Ranges" with a certain number of "Sections" in each "Township," e. g., county land on the south side of Tenth Avenue between Twenty-sixth Street and Thirty-second Street is located in Section 17, Township 20 North, Range 4 East. The physical boundaries of an area of land are stated and such an area of land is represented by one legal deed. Also, it is mapped off within whatever "Section" it is a part, and identified by a "Mark" number, e. g., John Doe, owner, Mark 7, Sec. 17, Twp. 20 No., Range 4 E.

A substantial amount of unplatted land, out of the city but within the Complex area and developed commercially, can be found in the same volumes of "Property Valuation" books as that of City platted land and listed under its Section, Range and Township number with the areas of land identified by their Mark number.

More remote, and often larger, areas of land such as that on the south side of Tenth Avenue from Thirty-eighth Street to approximately Fifty-seventh Street or the U. S. 87 By-pass, involves a more complicated procedure in finding the recorded assessment figures. This holds true not only for existing platted land but also for land that was previously remote and unplatted in the earlier assessment years.

The first step is to find the property owners' names. The recorded owners' names are listed in books known as "Lot" or "Land" books, the former being platted and the latter being unplatted. These books show transfers of ownerships throughout the years. If the books do not regress far enough so as to include the twenty-five year period of our study, then the first owner's deed number is taken to the Clerk and Recorder's Office, and from the actual deed, the previous owner is found. If this procedure does not render the owner in 1940, the base year, then one further step can be taken. An abstract of title will show all the owners from the first owner to the present. If the abstract needed is not on file at the Recorder's Office, it can be acquired from the Montana Abstract Company.

Once the owner's name is found, the assessed valuations are located on the Property Valuation records which are kept on file in alphabetical order according to name. These records are on sheets similiar to a pamphlet, one per name. Records of earlier years are stored in the basement of the Cascade County Court House. Another alternative is that these records are entered into Property Valuation books for the County Treasurer who in turn enters the tax and files the books in the basement of the Court House.

The majority of the land on the south side of Tenth Avenue from Thirty-eighth Street to the U. S. 87 By-pass is divided and identified by "Mark" numbers. These "Mark" areas are generally much larger than the physical area selected to be within the Complex. The total "Mark" or land area was changed into square feet and the assessed valuation of the total area was reduced to a "per acre" figure, then converted to a "per square foot" figure. The actual area designated to be included in the Complex was also calculated into square feet and multiplied by the "per square foot" assessment figure. This method of assessment allocation applies only to unplatted land when necessary.

On the north side of Tenth Avenue, the land is all platted at present. Thus the actual physical size of the platted blocks was used for computing acreage figures for the previous periods when the area was unplatted. The blocks were calculated into square feet, and the square feet were multiplied by the "per square foot" assessment figure. The "per square foot" assessment was determined by the same method as used for unplatted land on the south side of Tenth Avenue, i.e., the acreage assessment was converted to a "per acre" assessment, and finally to a "per square foot" assessment value.

E. Assessed Valuation in Cascade County and City of Great Falls: 1940-1964

During the past twenty-five years Cascade County experienced a pronounced increase in assessed valuation with the assessment rolls going from $95 million to $249 million, an increase of 162%. Also, in the same period the City of Great Falls, which represents the largest population density in Cascade County, increased its assessment rolls by 260% from $45 million to $161 million.

These assessment data include all classes of property which are assessed as required by law. The following summary presents the assessed valuation for different classes of property in Cascade County for selected years from 1940-1964. Included in the total assessment for Cascade County are (a) Land and Improvements, (b) Public Utilities, (c) Personal Property Other than Livestock, (d) Livestock, and (e) Net Proceeds of Mines. In addition to this summary, a more detailed presentation of assessment data is shown in Table 7 at the end of the chapter. In using the details of county assessment data it should be remembered that Land and Improvements include only "private" property assessments while land and improvements of "public" franchised businesses, such as electric, gas, telephone and and railroad companies, are handled under Public Utilities. On a county basis it is possible to show the breakdown of Public Utilities assessments into (a) those assessed by the County Assessor and (b) those assessments allocated to a county by the State Board of Equalization.

(thousands of dollars)

Assessed Valuation in Cascade County By Classes
of Property By Selected Years, 1940-1964

YEAR	TOTAL	Land and Improvements	Public Utilities	Personal Property	Livestock	Net Proceeds of Mines
1940	$ 94,859	$ 48,677	$24,825	$19,757	$1,502	$ 97
1945	94,121	47,302	24,966	18,688	3,068	97
1950	134,029	55,122	26,473	49,372	3,018	45
1955	170,041	72,040	28,506	65,084	4,410	1
1960	220,719	105,047	33,086	79,142	3,442	a/
1964	248,910	123,040	38,299	83,924	3,646	a/

a/ Less than $500.

Assessments in the City of Great Falls by classes of property for selected years from 1940 to 1964 are presented in the summary below. At the end of the chapter are shown additional assessment details for the City of Great Falls in Table 8 similar to the assessment details of Cascade County.

On a city basis, the property classes of Land and Improvements and Public Utilities have different property content than on a county basis. The Land and Improvements assessment data for the City of Great Falls includes not only "private" property assessments but also the part of the Public Utilities assessed by the County Assessor. On a city basis, the Public Utilities assessment data includes only the part allocated to the City by the State Board of Equalization.

(thousands of dollars)

Assessed Valuation in City of Great Falls By Classes
of Property By Selected Years, 1940-1964

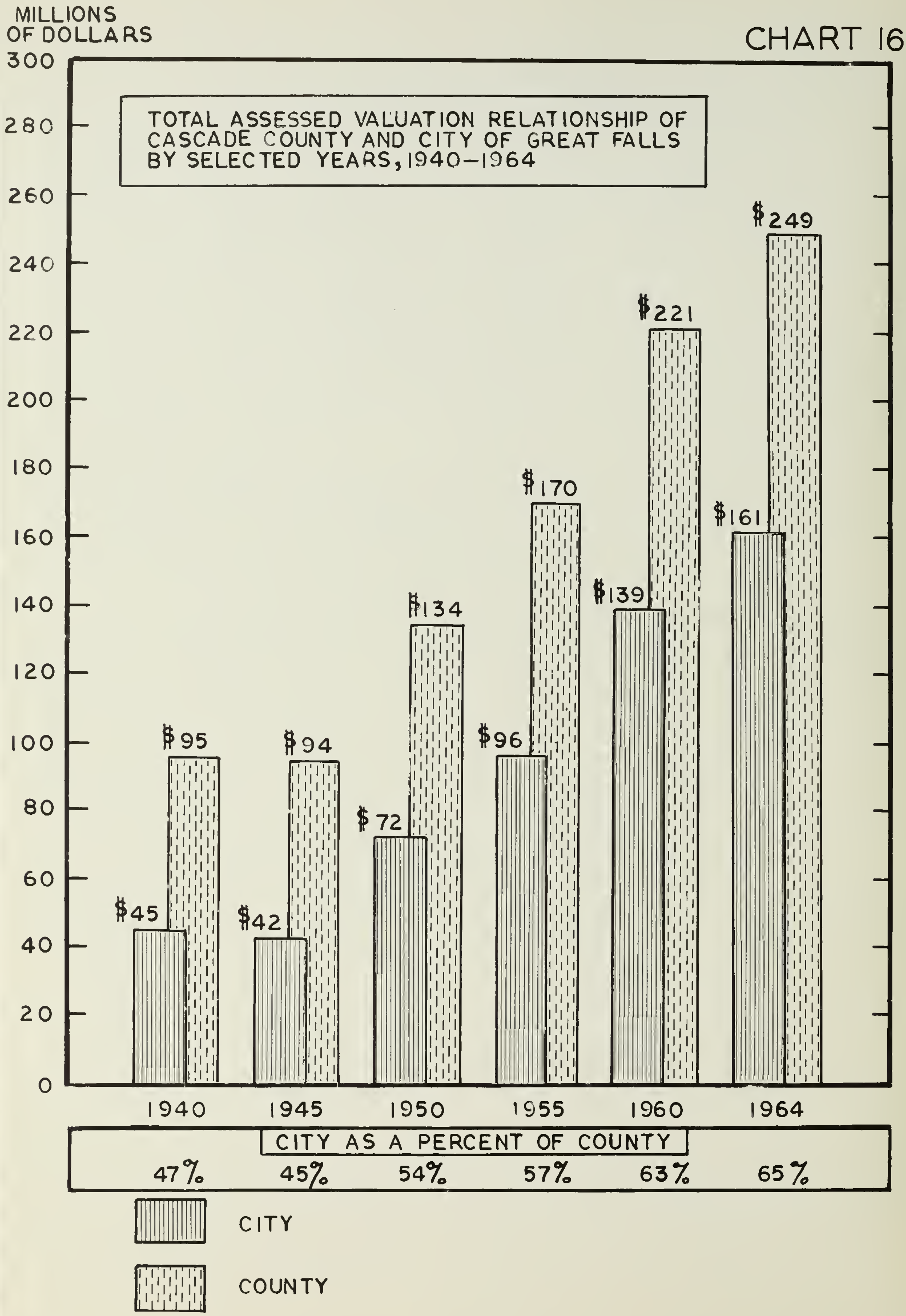
YEAR	TOTAL	Land and Improvements a/	Public Utilities b/	Personal Property
1940	$ 44,714	$ 36,974	$1,611	$ 6,129
1945	42,328	35,229	1,505	5,594
1950	71,934	55,764	1,759	14,411
1955	96,342	69,367	2,454	24,521
1960	139,251	103,102	2,281	33,869
1964	161,153	121,633	5,388	34,131

a/ Includes Public Utilities assessed by the County Assessor.

b/ Public Utilities assessment allocated by the State Board of Equalization.

Chart 16 presents the relationship of the total assessed valuation of Cascade

CHART 16



TOTAL ASSESSED VALUATION RELATIONSHIP OF CASCADE COUNTY AND CITY OF GREAT FALLS BY SELECTED YEARS, 1940–1964

County and the City of Great Falls for selected years from 1940 to 1964. Observe that the City as a percent of the County has increased from 47% to 65%

It is possible, however, for us to make a comparison between the real property assessment of Cascade County and the City of Great Falls by adding together for each jurisdiction the Land and Improvements and the Public Utilities assessments. The following summary presents this comparison for selected years from 1940 to 1964. The relationship shows that during this quarter of a century the real property assessed valuation of the City of Great Falls as a percent of Cascade County increased from 52% in 1940 to 79% in 1964. A review of the data shows that the largest increase in the relationship occurred in the years from 1945 to 1950 when, on a city basis, Land and Improvement assessments increased from $35,229,000 to $55,764,000.

Thus, for the period under review, 1940 to 1964, the City of Great Falls increased its real property assessment base faster than Cascade County as a whole. Chart 17 shows graphically the relationship of the real property assessments of Cascade County and the City of Great Falls for selected years.

(thousands of dollars)

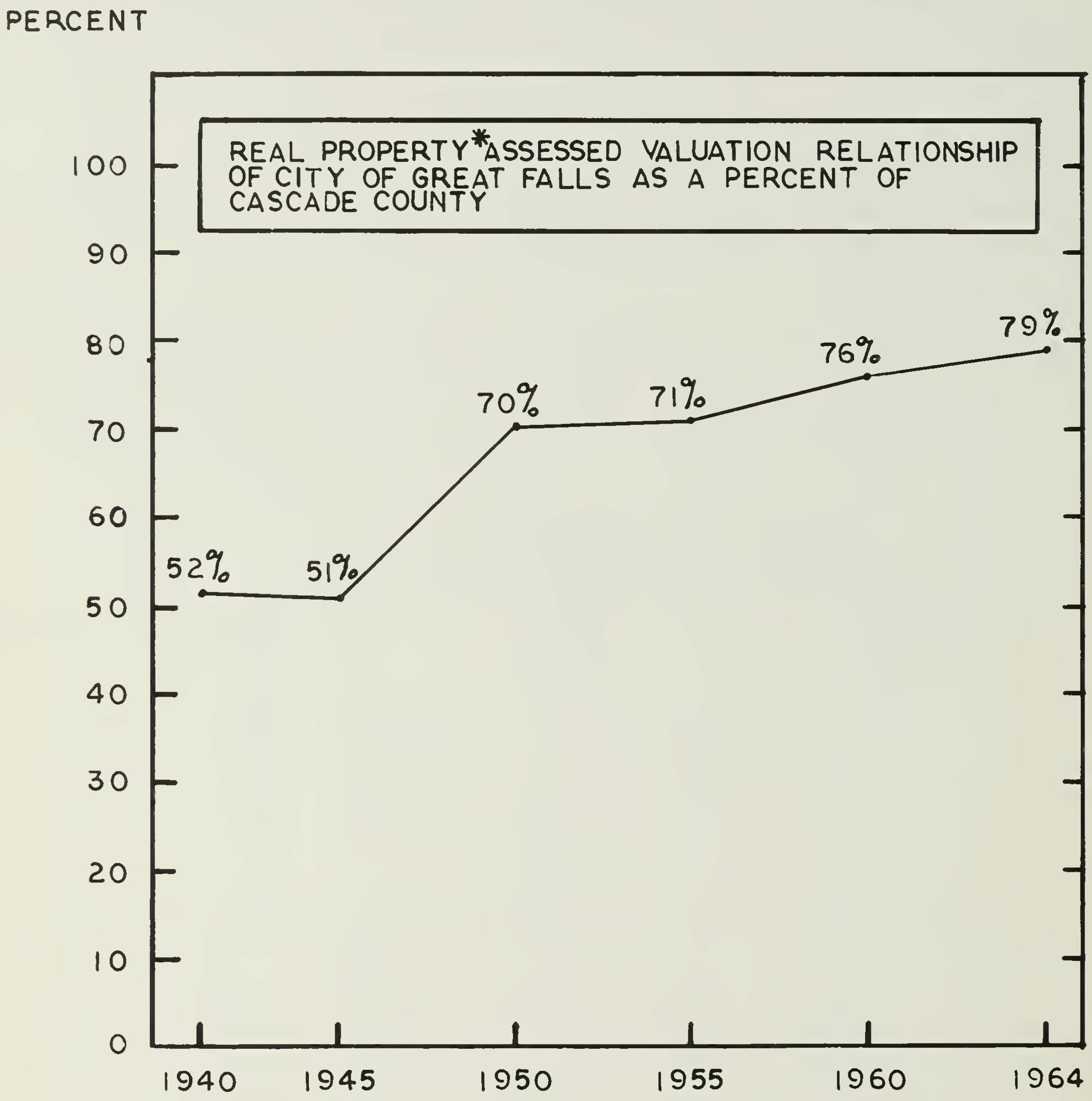
Real Property* Relationship of Cascade County and City of Great Falls By Selected Years, 1940-1964

YEAR	Cascade County	City of Great Falls	% City Of County
1940	$ 73,502	$ 38,585	52%
1945	72,268	36,734	51%
1950	81,595	57,523	70%
1955	100,546	71,821	71%
1960	138,133	105,383	76%
1964	161,339	127,021	79%

* Land and Improvements, and Public Utilities

The growth in the assessed valuation of real property in the City of Great Falls can be viewed in another light. While the increase from 1940 to 1964 was 230%, the growth from 1950 can be pictured as 120%, and even since 1960 the City has experienced a 21% increase. These relationships are shown below.

CHART 17


REAL PROPERTY* ASSESSED VALUATION RELATIONSHIP OF CITY OF GREAT FALLS AS A PERCENT OF CASCADE COUNTY

* LAND AND IMPROVEMENTS, AND PUBLIC UTILITIES.

Percent Increase in Real Property* Assessed Valuation
in the City of Great Falls By Selected Years
(1940=100) (1950=100) (1960=100)

YEAR	City of Great Falls (000's of $)	1940=100	1950=100	1960=100
1940	$ 38,585	100	-----	-----
1945	36,734	95	-----	-----
1950	57,523	149	100	-----
1955	71,821	186	125	-----
1960	105,383	273	183	100
1964	127,021	330	220	121

* Land and Improvements, and Public Utilities

F. Assessed Valuation in the Tenth Avenue Business Complex: 1940-1964

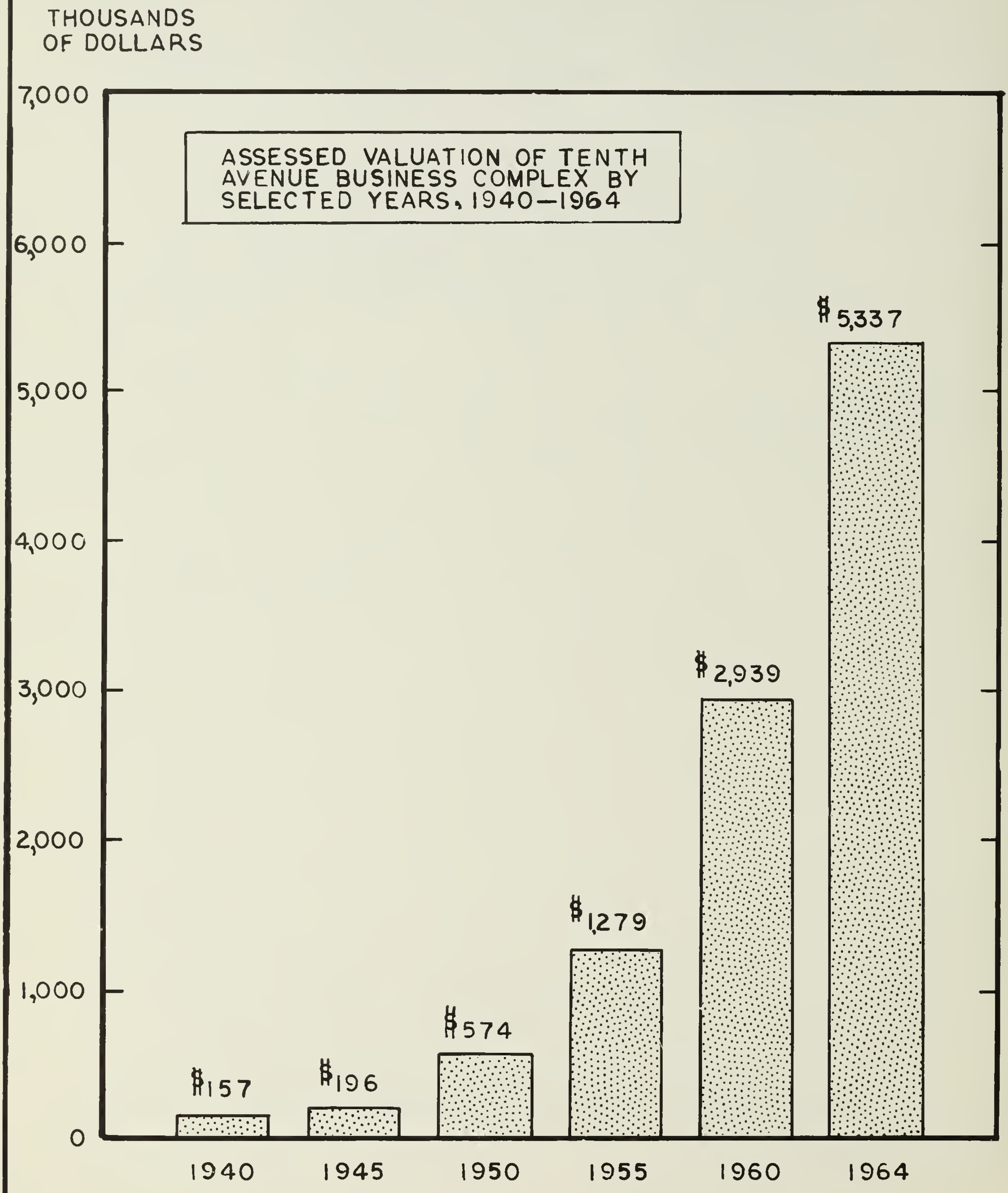
1. Growth of Tenth Avenue

While the assessed valuation of real property, as defined, in the City of Great Falls increased by 230% during the past quarter of a century, the increase in assessed valuation in the Tenth Avenue Business Complex shows an unbelievably large percentage, i. e., a 3307% increase. The chief reason for this large increase is the small dollar assessment base of the Complex back in 1940 when Tenth Avenue was completely undeveloped. Also, the main type of improvements in the area at that time were primarily some residential houses. In physical aspects it was dynamically different from the Tenth Avenue of to-day. Its 1940 assessed valuation was in keeping with its 1940 economic value.

Chart 18 shows the change in the assessed valuation of the Tenth Avenue Business Complex by selected years from 1940 to 1964.

The summary below brings out the comparison between the percent increase in City and the Complex's real property assessed valuations since 1940. It should be noted that a large part of the change occured in the Complex since 1950. Since 1950, the Complex experienced an 830% increase in assessed valuation while the City as a whole enjoyed only a 120% increase. Even in the present decade, the Complex has increased by 82% during the past four years while the City moved along with a 21% increase in assessed valuation of real property, as defined.

CHART 18


THOUSANDS OF DOLLARS
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
ASSESSED VALUATION OF TENTH AVENUE BUSINESS COMPLEX BY SELECTED YEARS, 1940—1964
$157
$196
$574
$1,279
$2,939
$5,337
1940
1945
1950
1955
1960
1964

Comparison of Percent Increase in Assessed Valuation
in City of Great Falls and Tenth Avenue Business Complex
(1940=100) (1950=100) (1960=100)

	City of Great Falls			Tenth Avenue Business Complex		
Year	1940=100	1950=100	1960=100	1940=100	1950=100	1960=100
1940	100	--	--	100	--	--
1945	95	--	--	125	--	--
1950	149	100	--	366	100	--
1955	186	125	--	816	223	--
1960	273	183	100	1876	512	100
1964	330	220	121	3407	930	182

2. Real Property Relationship of City and Complex

In 1940, the Tenth Avenue Business Complex had an assessed valuation of $156,676 which was only 0.41% of the City's real property, as defined, assessed valuation of $38,585,027. With the passing of the years, the assessed valuation of both the City and the Complex increased with the Complex increasing at a much faster rate than the City.

By 1964, the Complex had an assessed valuation of $5,337,385 which is currently 4.20% of the City's assessed valuation of $127,021,726. As can be observed in the following summary a large part of Tenth Avenue's growth has occurred since the 1950's, particularly from the year of 1955.

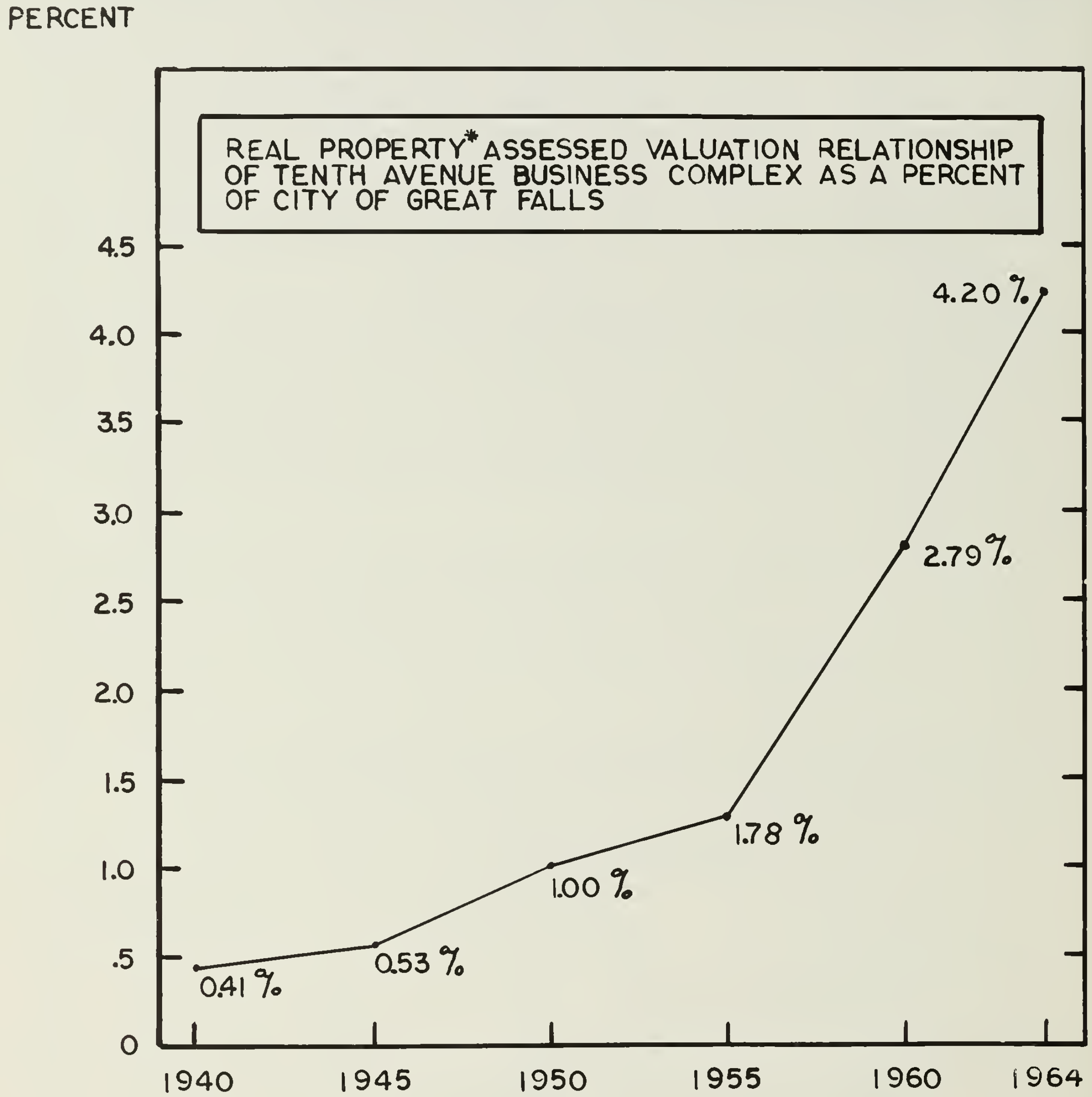
Real Property* Assessed Valuation Relationship of
Tenth Avenue Business Complex as a Percent of City of Great Falls
By Selected Years: 1940-1964

	(thousands of $)		
Year	City Great Falls	Tenth Avenue Business Complex	Tenth Avnue as % of City
1940	$ 38,585	$ 157	0.41%
1945	36,734	196	0.53
1950	57,523	574	1.00
1955	71,821	1,279	1.78
1960	105,383	2,939	2.79
1964	127,021	5,337	4.20%

* Includes Land and Improvements, and Public Utilities.

Chart 19 shows the real property assessed valuation relationship of the City and the Complex for selected years from 1940 to 1964.

CHART 19



* LAND AND IMPROVEMENTS, AND PUBLIC UTILITIES.

3. Relationship of Land and Improvement Growth: 1940-1964

Within the Tenth Avenue Business Complex itself, there are interesting relationships between the assessed valuation of land and the assessed valuation of improvements or buildings. It is interesting to note that throughout all twenty-five years, the assessed value of improvements was always higher than that of land. This relationship is shown in the following analysis which gives both a dollar and percent comparison.

Comparison of Assessed Valuation of Land and Improvements
in the Tenth Avenue Business Complex By Selected Years: 1940-1964

Year	(thousands of $) Land	Improvements	Total	Percent Relationship Land	Improvements
1940	$ 47	$ 110	$ 157	30%	70%
1945	83	113	196	43	57
1950	91	482	574	16	84
1955	154	1,125	1,279	12	88
1960	897	2,042	2,939	31	69
1964	2,019	3,319	5,337	38	62

Only in the year 1945 does land approach a close dollar and percent balance with improvements. Perhaps this development partially explains the decline in City assessed valuations for that period of time as shown previously. During the war years of the early 1940's, construction which results in increased improvement assessments was difficult to undertake because of war-time restrictions on the use of materials and manpower.

Also, it should be noted that in the current decade the percentage of land (38%) to total assessments has risen to its highest mark since the 1940-1945 era. This shift in relationship of land and improvements is pronounced since 1955 when a 12 to 88 ratio existed. Also, since 1955 the Complex has experienced its greatest increase in building permits which ultimately are reflected in an increase in improvement assessments. An exception to this procedure are the three large building permits for the College of Great Falls and the new Deaconess Hospital which do not result in increased improvement assessments because of the educational institution's and the hospital's tax exempt nature.

The following comparison analysis illustrates the increased importance of land in the Complex's assessment data since 1955. The dollar assessments of both land and improvements were calculated separately on an index basis using

Three base years---1940, 1950, and 1960. In all three situations, the percent increase in the land assessment has outrun the increase in the improvement assessment.

Percent Increase in Assessed Valuation of Land and Improvements
in the Complex (1940=100) (1950=100) (1960=100)

	Land			Improvements		
Year	1940=100	1950=100	1960=100	1940=100	1950=100	1960=100
1940	100	—	—	100	—	—
1945	179	—	—	102	—	—
1950	197	100	—	438	100	—
1955	332	169	—	1,021	233	—
1960	1,929	981	100	1,853	423	100
1964	4,340	2,207	225	3,013	688	163

G. Area Analysis Within the Tenth Avenue Business Complex

Section B of Chapter I which is titled "Concept and Characteristics of Tenth Avenue Business Complex and Its Areas" sets forth the geographic description of the division of Tenth Avenue into 12 areas. At this point, let us once again review briefly this block structure which is essential to our area analysis.

Tenth Avenue itself is the dividing line for classifying areas as either north side or south side. Next, the Complex is divided east and west by 9th, 13th, 20th, 30th, and 38th streets. Since the Complex begins at 3rd Street and terminates at the city line, we arrive at 12 areas; for example Area #1 is from 3rd to 9th Street on the north side of Tenth Avenue and Area #2 is from 4th to 9th Street on the south side of Tenth Avenue, etc. In effect, then, there are six areas on the north side and six areas on the south side.

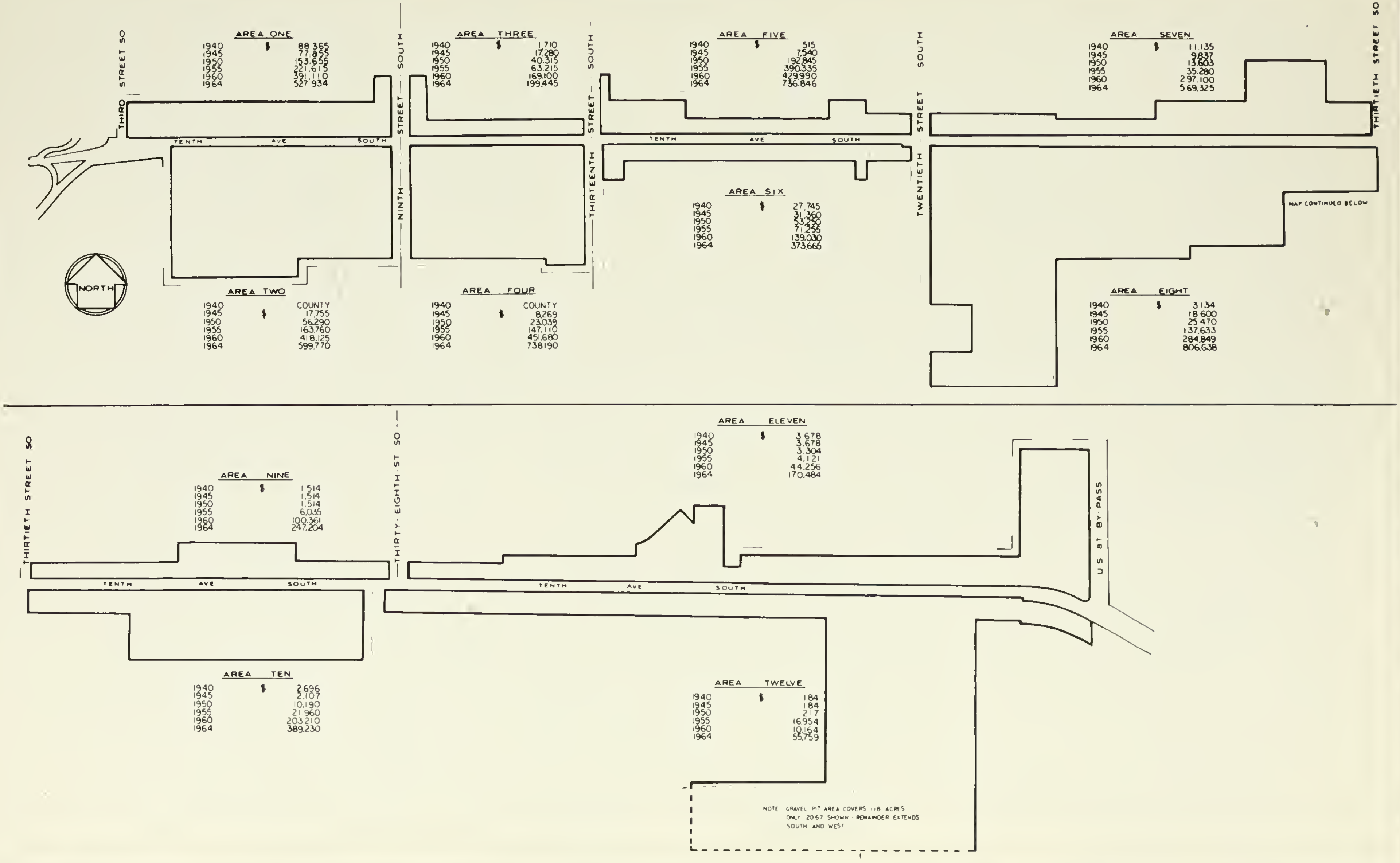
By this procedure, the Complex has been divided into 12 logical areas for individual study and comparison. The locations of these areas are readily available by turning to the map of this section, i.e., Map No. 6--Total Assessments (land and Improvements) By Areas.

For purposes of study and comparison, the assessed valuation of the areas on the north side of Tenth Avenue will be presented first.

TOTAL ASSESSMENTS (LAND AND IMPROVEMENTS) BY AREAS

IN THE TENTH AVENUE BUSINESS COMPLEX

BY SELECTED YEARS, 1940 - 1964



MAP NO. 6

Assessed Valuation of Tenth Avenue Business Complex By Areas
By Selected Years, 1940-1964

Year	North Side Area 1 (3rd to 9th St.)	Area 3 (9th to 13th St.)	Area 5 (13th to 20th St.)	Area 7 (20th to 30th St.)	Area 9 (30th to 38th St.)	Area 11 (38th to 57th St.)
1940	$ 88,365	$ 1,710	$ 515	$ 11,135	$ 1,514	$ 3,678
1945	77,855	17,280	7,540	9,837	1,514	3,678
1950	153,655	40,315	192,845	13,603	1,514	3,304
1955	221,615	63,215	390,335	35,280	6,035	4,121
1960	391,110	169,100	429,990	297,100	100,361	44,256
1964	527,934	199,445	736,846	569,325	247,204	170,484

Table 9 at the end of this section shows by selected years from 1940 to 1964 details of land, improvement and total assessments of each of the twelve areas. Insofar as the subsequent analysis is concerned, it will emphasize the total assessments of an area for the different years rather than changes in land and improvement assessments. Changes in these individual factors can be studied from the detailed table.

Just as the total assessment for the Complex showed a pronounced growth from 1940 to 1964 so also is this definite upward growth trend reflected in the assessment data of each area. In regard to the north side of Tenth Avenue, areas 1, 3, 5, and 7 are the older areas and areas 9 and 11 have been platted for development in more recent years. The detail of area development in the Complex is presented in Section H of this chapter, and is titled--History of Tenth Avenue Land Additions to the City.

Area 1 (3rd to 9th St.) contains part of the Original Townsite which accounts for its high assessed valuation in 1940 relative to the other areas. Its slow but steady growth is due probably to the fact that all the land in the area was largely in use twenty-five years ago. At present the area consists of several gasoline service stations and auto dealers, wholesalers, retail outlets, and some other establishments, such as: a motel, drinking establishments, etc.

Area 3 (9th to 13th St.) is less developed than Area 1 but has experienced a steady growth throughout the years. A number of factors are responsible for the steady growth of this area and no special factor can be pinpointed. There are many normal business establishments operating in the area, such as: service stations, wholesalers and retailers, eating and drinking establishments, an auto dealer, etc.

Area 5 (13th to 20th St.) has developed from a mere $515 of assessed valuation to $736,846, the highest of all areas on the north side, in the twenty-five years from 1940 to 1964. The area had a gigantic jump in assessed valuation in the 1945-1950 period. This increase was due probably to the platting of a large area of land, formerly outside the city, for city development. Its growth has been continuous over the years, and in recent years this area has experienced the addition of several major improvements or building projects. These major improvements or building projects include, for example, such new establishments as the Holiday Inn motel, the Prudential Insurance building, and the Century Agency building. Two other motels, several retail outlets, and many services, both professional and non-professional, are also located in this area. It may be noted also, that one entire square block is in use for apartment housing, namely, the Bel-Air Apartments.

Area 7 (20th to 30th St.) developed slowly until the later part of the 1950's. From 1955 to 1960, assessed valuation in this area increased from $35,280 to $297,100. During the subsequent four years, assessed valuation increased to $569,325 in 1964. Many new establishments have located in the area in the past ten years, giving it a definite commercial nature. These new establishments are numerous, offering various services and satisfying many consumer demands. In all, there are approximately forty establishments or businesses in this area, and they offer many professional and non-professional services. Located in the area are the Great Falls Federal Savings and Loan Association building, Buttrey's Super Store as well as several retail outlets and gasoline service stations.

Area 9 (30th to 38th Street.) and Area 11 (38th to 57th St.) are comparable. They are both recent additions to the City and each contains a potential for development. The increases in the assessment data for these area for 1960 and 1964 reflect primarily an upward valuation of land. The commercialization period is just beginning and a future rise in improvement assessment figures is almost inevitable. The improvements in Area 9 have progressed more rapidly than Area 11, and in both areas much vacant land remains for expansion purposes. Area 9 has several service stations, retail outlets, and both professional and non-professional businesses. In addition there are other establishments, such as auto and trailer dealers, a wholesaler and an eating and drinking establishment. In Area 11, it should be noted that although general business activity is lacking, there are some apartment houses. These apartment houses, however, are not located directly on Tenth Avenue.

On the south side of Tenth Avenue, areas 2, 4, 6, 8, 10 and 12 are located. The subsequent table presents the assessed valuation of the south side areas by selected years from 1940 to 1964.

Assessed Valuation of Tenth Avenue Business Complex By Areas
By Selected Years, 1940-1964

	South Side					
Year	Area 2 (3rd to 9th St.)	Area 4 (9th to 13th St.)	Area 6 (13th to 20th St.)	Area 8 (20th to 30th St.)	Area 10 (30th to 38th St.)	Area 12 (38th to 57th St.)
1940	County	County	$ 27,745	$ 3,134	$ 2,696	$ 184
1945	$ 17,755	$ 8,269	31,360	18,600	2,107	184
1950	56,290	23,039	53,250	25,470	10,190	217
1955	163,760	147,110	71,255	137,633	21,690	16,954
1960	418,125	451,680	139,030	284,849	203,210	10,164
1964	599,770	738,190	373,665	806,638	396,455	48,534

As the table indicates all areas have experienced growth in their assessed valuation over the years, but each area because of its location has undergone varying or different rates of development

Areas 2 (3rd to 9th St.) and 4 (9th to 13th St.) are the older areas and have experienced an almost identical process of growth with both areas being highly commercial areas today. In 1940 the land of these areas was owned by Cascade County and hence was not on the assessment roll. As the land moved out of county ownership and became subject to assessment, the assessed valuation for areas 2 and 4 increased until in 1964 they were $599,770 and $738,190, respectively.

At present the business establishments in Area 2 consist of several motels, auto dealers, retail outlets, gasoline service stations, and eating and drinking establishments. In addition the area has in its assessment data a bowling alley, a drive-in theater, and a Labor Union Temple.

Although Area 2 has been commercialized over the years with many types of businesses, much unused or commercially undeveloped land lies back from or to the south of commercially developed Tenth Avenue. Insofar as the physical depth of our 12 areas is concerned, areas 2 and 4 which extend south from Tenth Avenue to Thirteenth Avenue have the larger physical depth, except for Area 8 whose greater physical depth is in non-assessed property of the College of Great Falls.

Area 4's (9th to 13th St.) growth in assessed valuation is to a large extent due to the development of the Holiday Village Shopping Center which is the location of the majority of establishments in the area.

Area 6 (13th to 20th St.) has grown steadily in assessed valuation since 1940 but does not compare with the two previous areas, possibly because it is a mixture of both residential and commercial property with substantially less unused and undeveloped commercial property. The commercial activity includes many services, both professional and non-professional, several retail outlets, eating and drinking establishments, auto dealers, and service stations. A substantial number of these establishments is located in the Mather Building.

Area 8 (20th to 30th St.) is the more important area in terms of assessed valuation. As of 1964, its assessed value was $806,638, having grown from $3,134 in 1940. With an assessed value in 1960 of $284,849, the increase from 1960 to 1964 was $521,789. This situation prevails in the area despite the fact that a large physical portion is exempt from taxation, and thus not on the assessment register. The remainder of the area, however, is highly commercialized and new construction has continued to progress. In 1965, the assessed valuation will be even higher when all of the present construction is completed and subject to placement on the assessment register.

Concerning the present status of the area, several factors have influenced the assessment roll and the commercialization trend. Certainly, the College Park Medical Center has influenced both. The College of Great Falls is of economic importance to the surrounding area, and although tax exempt, it attracts other businesses and thus indirectly influences assessments within the area. Such large establishments as the Medical Center, the College of Great Falls, and the new Deaconess Hospital are probably factors in the location of several new apartment houses in the area, which on a total basis, are a substantial portion of the total assessed valuation in this area. Many other establishments are found here as well as retail outlets, eating and drinking establishments, gasoline stations, motels, an auto dealer, a Federal office, and various types of professional and non-professional services.

Area 10 (30th to 38th St.) is comparable to Area 6 (13th to 20th St.) in that it is residential with some commercial activity present. However, from 1940 to 1964 its assessed valuation increased from $2,696 to $396,455. Apartment houses are of major importance in respect to the total assessed valuation in comparison to other commercial businesses in the area. Although the number of apartment houses is more numerous than any one other type of business, there are in the area several trailer dealers, two eating and drinking establishments, professional and non-professional services, a trailer court, a motel, and one retail outlet.

Area 12 (38th to 57th St.) is completely different from all other areas. It is to a large extent unplatted and undeveloped. For this reason, its assessed valuation as of 1964 was only $48,534, having increased from a mere $184 in 1940.

During the past few years some construction has taken place and thus is reflected in the 1964 assessment data increase over 1960. The activity in Area 12 has been basically commercial and industrial. The commercial activity includes the Glacier Greyhound Park (currently non-operative), a golf driving range, and a new Heidelhaus Restaurant. This recent improvement addition is not listed in the 1964 total assessments but will undoubtedly increase significantly the 1965 assessment for the area. Industrial activity in Area 12 is concerned with sand and gravel pit operations.

H. History of Tenth Avenue Land Additions to the City

The Tenth Avenue Business Complex involves an area stretching from Third Street South to Fifty-seventh Street South, including both north and south sides of the "Avenue." Seventeen Additions and six Supplements account for the largest portion of this area, and it is to their history that this section relates.

An "Addition" is usually referred to as being a tract of land that has been platted into blocks and lots and accepted as part of the City of Great Falls. A "Supplement" can be viewed as an extension of that Addition whose name it bears. It is important to note that although these Additions and Supplements generally extend beyond the boundries of our Tenth Avenue Business Complex, we refer only to that part which falls within the actual Complex area.

Map No. 7--Land Additions to the City of Great Falls in the Tenth Avenue Business Complex: 1884-1964--should assist in the subsequent explanation.

The origin of the Tenth Avenue Business Complex can be traced back to the year 1884 when the city founder, Paris Gibson, platted the Original Townsite. Seven blocks of the Townsite, all on the north side of the "Avenue" fall within the Complex, covering an area from Third Street South to Tenth Street South.

From the formation of the Original Townsite to just before the turn of the century, there were four "additions" to the area, three in the year 1888 and one in 1890. Insofar as our Tenth Avenue Business Complex is concerned, these "additions" were the initial signs of growth in this area. To avoid confusion, the dates, names and other information regarding these "additions" as well as those to come, will be listed in table form respective of the era to which each one belongs. Each "addition" will be numbered as to its location on the map, and separated into "North" and "South" dependent upon which side of Tenth Avenue it is located. The above four "additions" are as follows:

NORTH SIDE OF 10TH AVE.

Refer to Map No. 8	Year	Addition or Supplement	Area brought into Complex (Street to Street)
1	1888	First Addition	10th St. to 13th St. So.
2	1888	Black Eagle Falls Addition	26th St. to 29th St. So.
3	1890	Huy Addition	20th St. to 23rd St. So.
		SOUTH SIDE OF 10TH AVE.	
4	1888	Fairview Addition	14th St. to 20th St. So.

Following a lull of twenty-three years, three more "additions" appeared in 1913. That year witnessed the second large "addition" on the south side of Tenth Avenue. It is interesting to note that two of these "additions" the Tenth and Eleventh, as well as the Fifteenth Addition in 1943, were all platted by the Great Falls Water Power and Townsite Company whose founders were Paris Gibson and James J. Hill.

NORTH SIDE OF 10TH AVE.

Refer to Map No. 8	Year	Addition or Supplement	Area brought into Complex (Street to Street)
5	1913	Tenth Addition	In 13 hundred block & 9th Ave. So.
6	1913	Eleventh Addition	23rd St. to 26th St. So.
		SOUTH SIDE OF 10TH AVE.	
7	1913	Lincoln Heights Addition	20th St. to 26th St. So.

There were no further "additions" to the Tenth Avenue Business Complex until 1943. This was a period of thirty years without expansion in this area. In that year of 1943, the Great Falls Townsite Company platted the Fifteenth Addition, the third to appear on the south side of Tenth Avenue and the eighth in the Complex, spanning from Fourth Street South to Twelfth Street South.

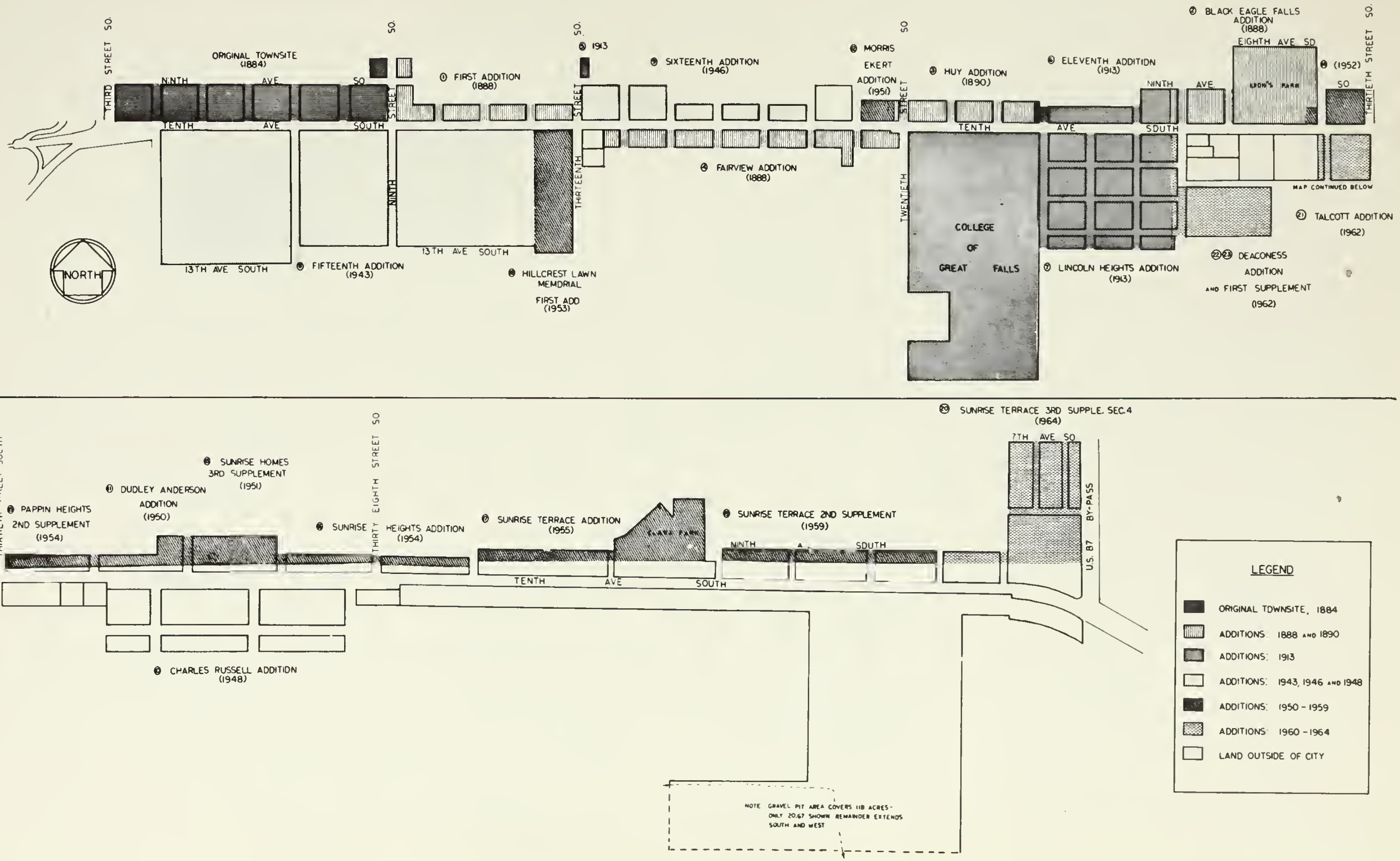
SOUTH SIDE OF 10TH AVE.

Refer to Map No. 8	Year	Addition or Supplement	Area brought into Complex (Street to Street)
8	1943	Fifteenth Addition	4th St. to 12 St. So.

The immediate post-war period witnessed two "additions" to the area, one on the north side of the "Avenue" in 1946 and one on the south side in 1948. Both "additions" were platted by the English Reality Company of Great Falls and amounted to some forty and one-half acres to be added to the area.

LAND ADDITIONS TO THE CITY OF GREAT FALLS, 1884-1964

IN THE TENTH AVENUE BUSINESS COMPLEX


THIRD STREET SO.
ORIGINAL TOWNSITE (1884)
NINTH AVE SO
TENTH AVE SOUTH
13TH AVE SOUTH
NORTH
FIFTEENTH ADDITION (1943)
NINTH STREET SO.
① FIRST ADDITION (1888)
13TH AVE SOUTH
HILLCREST LAWN MEMORIAL FIRST ADD (1953)
THIRTEENTH STREET SO.
⑤ 1913
SIXTEENTH ADDITION (1946)
④ FAIRVIEW ADDITION (1888)
MORRIS EKERT ADDITION (1951)
TWENTIETH STREET SO
③ HUY ADDITION (1890)
COLLEGE OF GREAT FALLS
⑤ ELEVENTH ADDITION (1913)
⑦ LINCOLN HEIGHTS ADDITION (1913)
② BLACK EAGLE FALLS ADDITION (1888)
EIGHTH AVE SO
LYON'S PARK
(1952)
THIRTIETH STREET SO.
MAP CONTINUED BELOW
㉑ TALCOTT ADDITION (1962)
㉒㉓ DEACONESS ADDITION AND FIRST SUPPLEMENT (1962)
THIRTIETH STREET SOUTH
PAPPIN HEIGHTS 2ND SUPPLEMENT (1954)
DUDLEY ANDERSON ADDITION (1950)
SUNRISE HOMES 3RD SUPPLEMENT (1951)
CHARLES RUSSELL ADDITION (1948)
THIRTY EIGHTH STREET SO
SUNRISE HEIGHTS ADDITION (1954)
SUNRISE TERRACE ADDITION (1955)
CLARA PARK
TENTH AVE SOUTH
SUNRISE TERRACE 2ND SUPPLEMENT (1959)
NINTH A SOUTH
⑳ SUNRISE TERRACE 3RD SUPPLE. SEC.4 (1964)
7TH AVE SO
U.S. 87 BY-PASS
LEGEND
ORIGINAL TOWNSITE, 1884
ADDITIONS 1888 AND 1890
ADDITIONS: 1913
ADDITIONS: 1943, 1946 AND 1948
ADDITIONS: 1950 - 1959
ADDITIONS: 1960 - 1964
LAND OUTSIDE OF CITY

NOTE GRAVEL PIT AREA COVERS 118 ACRES - ONLY 20.67 SHOWN REMAINDER EXTENDS SOUTH AND WEST

MAP NO. 7

NORTH SIDE OF 10TH AVE.

Refer to Map No. 8	Year	Addition or Supplement	Area brought into Complex (Street to Street)
9	1946	Sixteenth Addition	13th St. to 18th St. So.

SOUTH SIDE OF 10TH AVE.

10	1948	Charles Russell Addition	32nd St. to 38th St. So.

Growth of the Tenth Avenue Business Complex progressed rapidly as we entered the decade of the 1950's. From 1950 through 1955, five Additions and three Supplements came into existence, all but one on the north side, and totaling some twenty-eight and one-half acres.

NORTH SIDE OF 10TH AVE.

Refer to Map No. 8	Year	Addition or Supplement	Area brought into Complex (Street to Street)
11	1950	Dudley Anderson Addition	32nd St. to 35th St. So.
12	1951	Morris Ekert Addition	19th St. to 20th St. So.
13	1951	Sunrise Homes 3rd Supp.	35th St. to 36th St. So.
14	1952	Pappin Heights 1st Supp.	29th-30th St. on 9th Ave. So.
15	1954	Pappin Heights 2nd Supp.	29th St. to 32nd St. So.
16	1954	Sunrise Heights Addition	36th St. to 40th St. So.
17	1955	Sunrise Terrace Addition	40th St. to Doris Drive

SOUTH SIDE OF 10TH AVE.

18	1953	Hillcrest Lawn Memorial First Addition	12th St. to 13th St. So.

Although the years from 1956 through 1958 were ones of inactivity, expansion resumed again in 1959. In this final period of growth, from 1959 to April 10, 1964, two Additions and three Supplements were platted within the area of our Complex, amounting to some forty plus additional acres of land.

NORTH SIDE OF 10TH AVE.

Refer to Map No. 8	Year	Addition or Supplement	Area brought into Complex (Street to Street)
19	1959	Sunrise Terrace 2nd Supp.	Doris Drive to 52nd St. So.
20	1964	Sunrise Terrace 3rd Suppl. Sec. 4	52nd St. to 57th St. So.

SOUTH SIDE OF 10TH AVE.

21	1962	Talcott Addition	29th St. to 30th St. So.
22	1962	Deaconess Addition	26th St. to 28th St. So.
23	1962	Deaconess 1st Supp.	on 26th St. So.

This brings us up-to-date as far as the history of "additions" is concerned. As to the future, if the recent trend continues we should see new "additions" in the coming years, especially on the south side of Tenth Avenue where a considerable portion of our Complex is still county land outside the city boundaries.

References:

1. Dates and other information on the platting of "addition" were taken from the Index to Platts, Cascade County, County Clerk and Recorder's Office.

2. Acreage figures were taken from the assessment books at the County Assessor's Office, Cascade County.

Table 7

Assessed Valuations in Cascade County by Classes of Property, 1940-64

(thousands of dollars)

YEAR	GRAND TOTAL	LAND AND IMPROVEMENTS			PUBLIC UTILITIES			PERSONAL PROPERTY	LIVESTOCK (b)	NET PROCEEDS OF MINES
		TOTAL	Land	Improvements	TOTAL	Assessed by County Assessor (a)	Assessment Allocated by State Board of Equalization			
1940	$94,859	$48,677	$17,226	$31,451	$24,825	$16,012	$8,813	$19,757	$1,502	$ 97
1941	90,653									
1942	92,974									
1943	91,267									
1944	92,642									
1945	94,121	47,302	16,171	31,131	24,966	15,739	9,227	18,688	3,068	97
1946	95,143									
1947	105,394									
1948	114,183									
1949	125,533									
1950	134,029	55,122	16,616	38,506	26,473	16,600	9,873	49,372	3,018	45
1951	141,842									
1952	150,107									
1953	156,455									
1954	162,164									
1955	170,041	72,040	17,128	54,912	28,506	16,607	11,899	65,084	4,410	1
1956	189,096									
1957	195,637									
1958	202,057									
1959	209,499									
1960	220,719	105,047	28,309	76,739	33,086	20,092	12,994	79,142	3,442	(c)
1961	227,123									
1962	232,968									
1963	243,223									
1964	248,910	123,040	32,807	90,233	38,299	21,262	17,037	83,924	3,646	(c)

(a) Largely Land and Improvements; but also includes Personal Property assessments.
(b) Other than Livestock.
(c) Less than $500.

Source: Biennial Reports of the State Board of Equalization.

Table 8

Assessed Valuations in City of Great Falls By Classes of Property, 1940-1964

(thousands of dollars)

YEAR	GRAND TOTAL	LAND AND IMPROVEMENTS (a)			PUBLIC UTILITIES			PERSONAL PROPERTY (c)	LIVESTOCK	NET PROCEEDS OF MINES
		TOTAL	Land	Improvements	TOTAL	Assessed by County Assessor	Assessment Allocated by State Board of Equalization			
1940	$44,714	$36,974	N.A.	N.A.	--	(b)	$1,611	$6,129	0	0
1941	41,406									
1942	42,793									
1943	39,959									
1944	40,699									
1945	42,328	35,229	N.A.	N.A.	--	(b)	1,505	5,594	0	0
1946	44,035									
1947	51,990									
1948	57,797									
1949	63,489									
1950	71,934	55,764	N.A.	N.A.	--	(b)	1,759	14,411	0	0
1951	76,961									
1952	81,199									
1953	85,325									
1954	88,295									
1955	96,342	69,367	N.A.	N.A.	--	(b)	2,454	24,521	0	0
1956	111,708									
1957	118,145									
1958	121,981									
1959	128,714									
1960	139,251	103,102	N.A.	N.A.	--	(b)	2,281	33,869	0	0
1961	143,649									
1962	147,873									
1963	156,029									
1964	161,153	121,633	N.A.	N.A.	--	(b)	5,388	34,131	0	0

N.A. Not Available

(a) Includes Public Utilities assessment determined by County Assessor.

(b) Included in Land and Improvement assessments.

(c) Other than Livestock.

Source: Cascade County Assessor and Treasurer offices.

Table 9
ASSESSED VALUATIONS FOR TENTH AVENUE BUSINESS COMPLEX BY AREAS, BY SELECTED YEARS, 1940-1964

NORTH SIDE ASSESSMENTS

	AREA 1 (3rd to 9th St.)			AREA 3 (9th to 13th st.)			AREA 5 (13th to 20th St.)		
YEAR	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT
1940	$88,365	$14,665	$73,700	$17,710	$5,690	$12,020	$ 515	$ 190	$ 325
1945	77,855	13,435	64,420	17,280	5,200	12,080	7,540	7,215	325
1950	153,655	13,815	139,840	40,315	5,615	34,700	192,845	9,010	183,835
1955	221,615	16,915	204,700	63,215	5,900	57,315	390,335	10,235	380,100
1960	391,110	110,245	280,865	169,100	74,205	94,895	429,990	72,885	357,105
1964	527,934	242,129	285,805	199,445	121,800	77,645	736,846	165,005	571,841

SOUTH SIDE ASSESSMENTS

	AREA 2 (4th to 9th St.)			AREA 4 (9th to 13th St.)			AREA 6 (13th to 20th St.)		
YEAR	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT
1940	County*	County*	0	County *	County *	0	$ 27,745	$ 7,320	$ 20,425
1945	$17,755	$11,425	$ 6,330	$ 8,269	$7,669	$ 600	31,360	6,680	24,680
1950	56,290	12,690	43,600	23,039	6,889	16,150	53,250	6,815	46,435
1955	163,760	27,635	136,125	147,110	22,685	124,425	71,255	7,065	64,190
1960	418,125	142,990	275,135	451,680	153,230	298,450	139,030	50,515	88,515
1964	599,770	262,650	337,120	738,190	265,725	472,465	373,665	229,475	144,190

*LAND OWNED BY THE COUNTY

Table 9 (continued)

ASSESSED VALUATIONS FOR TENTH AVENUE BUSINESS COMPLEX BY AREAS, BY SELECTED YEARS, 1940-1964

NORTH SIDE ASSESSMENTS

	AREA 7 (20th to 30th St.)			AREA 9 (30th to 38th St.)			AREA 11 (38th to 57th St.)		
YEAR	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT
1940	$11,135	$ 7,445	$ 3,690	$ 1,514	$ 1,514	0	$ 3,678	$ 3,678	0
1945	9,837	5,657	4,180	1,514	1,514	0	3,678	3,678	0
1950	13,603	7,493	6,110	1,514	1,514	0	3,304	3,304	0
1955	35,280	12,845	22,435	6,035	6,035	0	4,121	4,121	0
1960	297,100	96,570	200,530	100,361	32,406	$ 67,955	44,256	22,466	$ 21,790
1964	569,325	227,220	342,105	247,204	116,601	130,603	170,484	68,989	101,495

SOUTH SIDE ASSESSMENTS

	AREA 8 (20th to 30th St.)			AREA 10 (30th to 38th St.)			AREA 12 (38th to 57th St.)		
YEAR	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT	TOTAL	LAND	IMPROVEMENT
1940	$ 3,134	$ 3,134	0	$ 2,696	$2,696	0	$ 184	$ 184	0
1945	18,600	18,600	0	2,107	2,107	0	184	184	0
1950	25,470	13,895	$ 11,575	10,190	10,190	0	217	217	0
1955	137,633	13,833	123,800	21,690	10,190	$ 11,500	16,954	16,954	0
1960	284,849	61,389	223,460	203,210	70,960	132,250	10,164	9,579	$ 585
1964	806,638	183,583	623,055	389,230	161,925	227,305	55,759	10,109	45,650

VII. EMPLOYMENT: A MEASURE OF COMMERCIAL DEVELOPMENT

A. Background

The purpose of this chapter is to analyze the volume of employment provided by business establishments in the Tenth Avenue Business Complex.

The employment data were obtained from all the establishments within the Complex by personal interviews in September 1964 and recorded by the interviewer on a Survey Analysis Sheet (Appendix 2). The recorded employment figures were furnished by the owners and managers of establishments. Information was obtained so as to categorize the employment details in the following manner.

Total Employment 1964

By Length of Time Worked
  (1) Full-time
  (2) Part-time

By Sex
  (1) Male
  (2) Female

By Type of Employment
  (1) Administrative
  (2) Sales
  (3) Operating

B. Employment Total By Type of Land Use Activity

The total employment of the Tenth Avenue Business Complex is 2,355. Table 10 shows total employment broken down by the types of activity which are discussed in Chapter VIII--Land Use By Types of Business and Non-business Activities, and in Appendix 4.

The following list presents the types of activity which have employees, in the order of their relative importance to the total employment figure.

1.	Commercial	1,170
2.	Services	479
3.	Public and Quasi-Public Buildings	211
4.	Non-Manufacturing	193
5.	Residential	164
6.	Wholesale and Storage	80
7.	Manufacturing	50
8.	Public and Quasi-Public Open Space	8

TABLE 10

1964 Employment in the Complex By Type of Land Use Activities and Other Characteristics

Type of Land Use Activities	TOTAL	By Length of Time Worked		By Sex		By Type of Employment		
	1964	Full Time	Part Time	Male	Female	Adminis-trative	Sales	Operat-ing
Commercial	1,170	938	232	735	435	175	231	764
Services	479	365	114	335	144	119	73	287
Public & Quasi-Public Bldgs.	211	146	65	115	96	32	6	173
Non-Manufacturing	193	93	100	190	3	14	10	169
Residential	164	110	54	69	95	47	0	117
Wholesale & Storage	80	73	7	56	24	17	11	52
Manufacturing	50	32	18	42	8	5	29	16
Public & Quasi-Public Open Space	8	1	7	4	4	1	0	7
TOTAL	2,355	1,758	597	1,546	809	410	360	1,585
PERCENT	100%	75%	25%	66%	34%	17%	16%	67%

It is interesting to view total employment in terms of several characteristics, i.e., by length of time worked, by sex, and by type of employment. Chart 20 graphically presents relationships concerning these characteristics.

Of the 2,355 total employees, 1,758 or 75% are employed full-time. Thus, 597 or 25 percent are part-time.

Sixty-six (66) percent, or 1,546 of the employees, are male while the remaining 34 percent, or 809 employees, are female.

Information was also obtained in regard to the area of responsibility of the employee. Thus, workers were grouped by type of employment responsibility as follows:

	Employees	Percent
Administrative	410	17%
Sales	360	16%
Operating	1,585	67%

ADMINISTRATIVE employment consists of active proprietors and managers of businesses and those individuals designated by them as having primarily supervisory or administrative responsibility.

SALES employment consists of those workers designated by the owner or manager of a business as being engaged primarily in selling activities, either indoors (sales clerks) or outdoors (insurance salesmen).

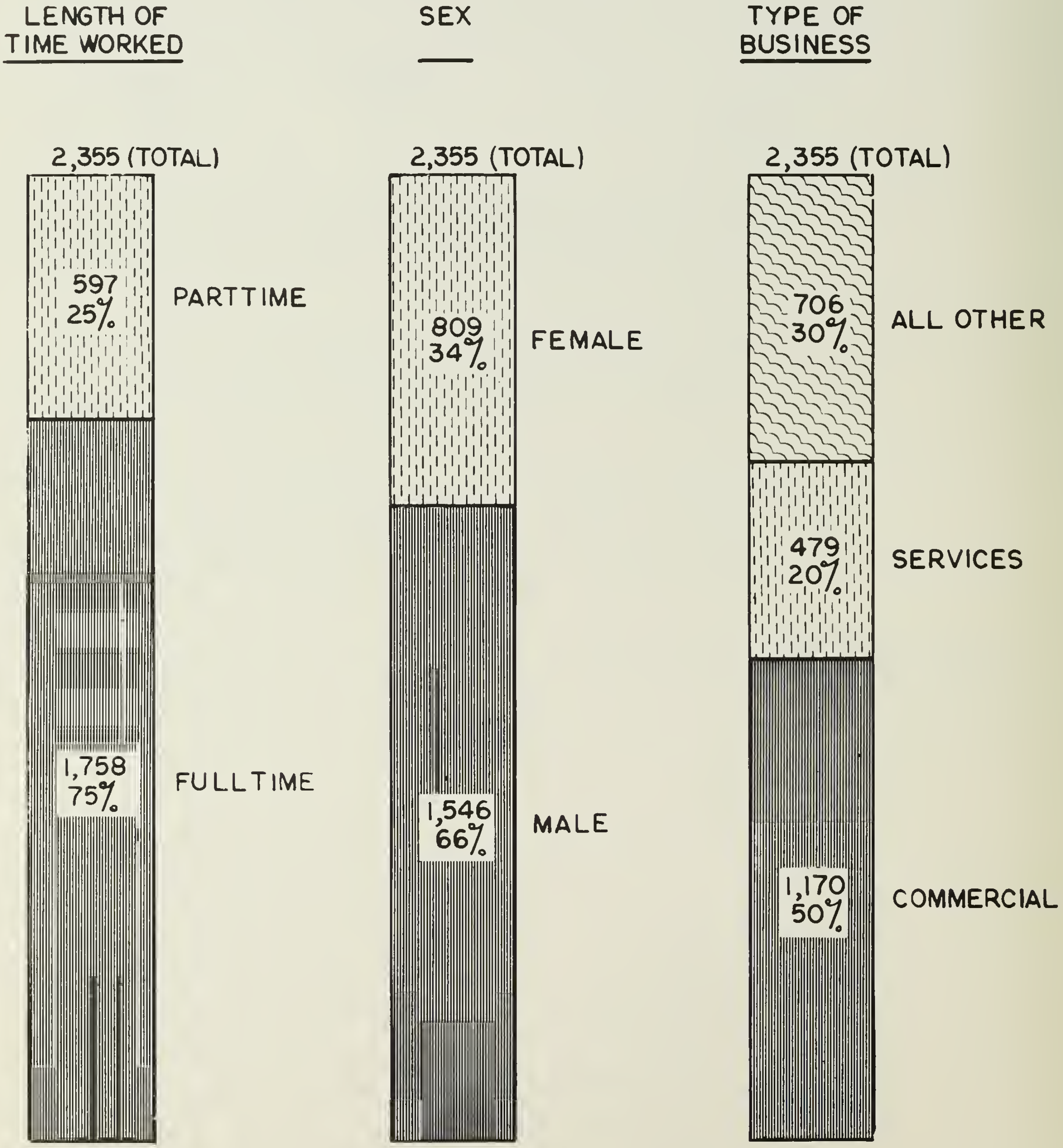
OPERATING employment consists of those workers which the owner or manager of a busiess did not designate as Administrative or Sales. Thus, Operating workers range all the way from grocery clerks in the super food markets to the College faculty employees.

C. Importance of Commercial Employment

A review of the data in Table 10 shows that Commercial employment leads the employment data of all types of activity in regard to every characteristic.

CHART 20

EMPLOYMENT IN THE 'COMPLEX' AS OF SEPTEMBER 1964



The summary to the right relates Commercial employment to total employment in the Complex with percentages shown in the last column. The high percentages prove the importance of Commercial activity to the Tenth Avenue Business Complex, and thus ultimately to the economy of the whole community of Great Falls.

Relation of Commercial and Total Employment

	All Types	Commercial Activity	Commercial as % of:
TOTAL 1964 Employment	2,355	1,170	50%
Full-Time	1,758	938	53%
Part-Time	595	232	39%
Male	1,546	735	48%
Female	809	435	54%
Administrative	410	175	43%
Sales	360	231	64%
Operating	1,585	764	48%

What accounts for these high percentages of employment in Commercial? The Commercial classification includes retail outlets (all types), eating and drinking establishments, auto dealers, gasoline service stations, and household trailers (sales and service). Of all these types, retail outlets is the most prominent employer, accounting for over half of the total Commercial employment. The following summary relates retail outlets to total Commercial employment data.

Commercial vs. Retail Outlets Employment

	Total	By Length of Time Worked		By Sex		By Type of Employment		
	1964	Full Time	Part Time	Male	Female	Admin.	Sales	Oper.
Commercial	1,170	938	232	735	435	175	231	764
Retail Outlets	629	514	115	410	219	85	179	365
Retail as % of Commercial	54%	55%	50%	56%	50%	49%	77%	48%

The summary definitely displays the impact of retail outlets (some 24 different types in all) upon the Commercial classification, especially in the employment of sales personnel. Commercial activity accounts for 64 percent of the total sales force in the Complex and retail outlets comprise better than three-fourths of Commercial employment.

One further point of interest concerning retail outlets is that out of twenty-four different types of retail outlets, one type, that of Super Food

Markets accounts for one-third of the total retail outlet employees, half of the part-time employees, and better than half of the operating employees. They employ 210 person, 57 of them part-time and 200 of the 210 are operating personnel.

Another important commercial type of business is that of eating and drinking establishments. They employ 312 out of 1,170 persons in the Commercial classification, or 27%. 208 of these 312 employees are females, which means that of the total Commercial female employees, 48% are employed by eating and drinking establishments. Thus it can be concluded that the land use activity classified as Commercial truly plays a large role in employment in the Tenth Avenue Business Complex.

D. Importance of Services Employment

Another type of activity which deserves mentioning is that classified as Services. Looking back at the table of employment by types of land use activities, it should be noted that although Services does not compare with Commercial, it does produce strikingly higher figures than any of the remaining types of activities. In all of the columns, Services remain the second highest figures. These Services consist of those classified as personal; and business; financial, insurance, and real estate; medical and health; legal, engineering, and accounting; etc.

Together, Commercial (49.6%) and Services (20.4%) account for 70 percent of the total Complex employment. Out of 2,355 employees within the Complex area, 1,649 fall into the Commercial and Services classification.

E. Relation of Complex and Cascade County Employment

The total employment figure of 2,355 is a significant figure by itself. The Montana State Employment Service reported that there were 22,400 non-agricultural employees in Cascade County during the month of September, 1964. [a/] September was the same month that the employment data for the Tenth Avenue Business Complex were obtained.

Although the employment data from the two independent sources will be compared, it is recognized that they are not strictly comparable. Montana State Employment Service excludes from employment, proprietors, firm members and self-employed persons which groups are included in the Tenth Avenue survey count.

Employment in the Complex is a considerable portion of the County total, especially when the small geographical and physical area of the Complex is taken into consideration. Furthermore, it should be pointed out that the County figure of 22,400 includes some types of employment that are not natural for a small area such as the Complex. For example, Cascade County has 3,200 employees in manufacturing and 4,200 government employees. The Tenth Avenue Business Complex has only 50 manufacturing employees and 31 government employees. If both types of employees were eliminated, the employment totals to be compared would be as follows:

	Cascade County	Complex as % of Total	Tenth Avenue Business Complex
ORIGINAL TOTALS	22,400	10.5%	2,355
Manufacturing	-3,200		- 50
Government	-4,200		- 31
NEW TOTALS	15,000	15.2%	2,274

More subtraction could be made and the percent increased but this is not necessary since the point has already been made, that is, that the employees within the Tenth Avenue Business Complex are significant in number when compared to total County employment. Also, in the spring of 1965 the Complex's employment count increased with the opening of the new Deaconess Hospital.

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a/ Figure for non-agricultural employment (Cascade County) excludes proprietors, firm members, armed forces personnel, domestic servants, and self-employed persons. Montana State Employment Service--Montana Labor Market, November 1964, p.3.

VIII. LAND USE BY TYPES OF BUSINESS AND NON-BUSINESS ACTIVITIES

A. BPR Land Use Activities Code and Condensed Land Use Activities Code

The designation of "business" in the Tenth Avenue economic impact research project is based on the code and titles of the Bureau of Public Road's Land Use Activities Code for Origin--Destination Studies (Appendix 4). However, for analysis of specific types of "businesses" in the study, a condensed type of land use activities code was devised. This code consists of nine (9) specific divisions. The divisions and their sub-divisions are as follows:

Condensed Land Use Activities Code

I. RESIDENTIAL
  a. Single Dwellings (residences)
  b. Multiple Dwellings (apartments)
  c. Motels
  d. Trailer Courts

II. MANUFACTURING
  a. Dairy Products
  b. Beverage

III. NON-MANUFACTURING INDUSTRY
  a. Sand and Gravel
  b. Construction
  c. Radio Broadcasting
  d. Electric Utility Booster Sub-station

IV. COMMERCIAL
  a. Eating and Drinking Establishments (restaurants, all types)
  b. Auto Dealers (sales & service)
  c. Household Trailers (sales & service)
  d. Gasoline Service Stations
  e. Retail Stores (all types)

V. WHOLESALE AND STORAGE
  a. Wholesalers with stock
  b. All other wholesalers

VI. SERVICES
  a. Financial, Insurance, Real Estate
  b. Medical and Health
  c. Legal, Engineering, Accounting
  d. Vacant Service Area
  e. All Other Services

VII. PUBLIC AND QUASI-PUBLIC BUILDINGS
  a. College
  b. Hospital
  c. Churches
  d. Non-Profit Organizations
  e. State Offices
  f. Federal Offices
  g. Bowling and Billiards

VIII. PUBLIC AND QUASI-PUBLIC OPEN SPACE
  a. Public Parks
  b. Drive-In Theatre
  c. Race Track

IX. OTHER OPEN SPACE
  a. General Farms
  b. Open Land

B. Land Use Data By Condensed Types of Land Use Activities

1. Summary of all Types of Activities

Analysis of land use by types of land use activities in the Tenth Avenue Business Complex has been pursued in terms of land, floor space, parking area, outside storage area, area in other use, and vacant land.

Table 11, Land-Use Characteristics and Their Rank By Types of Land Use Activities, presents a summary of the land use information as it pertains to the nine condensed types of activities in the Complex. To assist in the analysis of the six characteristics of land use, each type of activity in the table has been ranked according to size. With the aid of this table, perhaps it is easier to visualize the nine types of land use activities in the Complex in respect to each other.

Map No. 8--Land Use By Types of Land Use Activities and Major Improvements, 1964--gives a visual picture of the physical size and location of the many types of land use in the Complex.

In the following analysis, each type of activity and its six land use characteristics will be presented separately. Comparison will be made between the land use data of each type of activity and total data of the Complex in order to evaluate the relative importance of each land use characteristic in each type of activity.

Judgment of the relative importance of each type of land use activity in the Complex was used to determine the sequence of presentation and analysis of the following sections.

2. Commercial

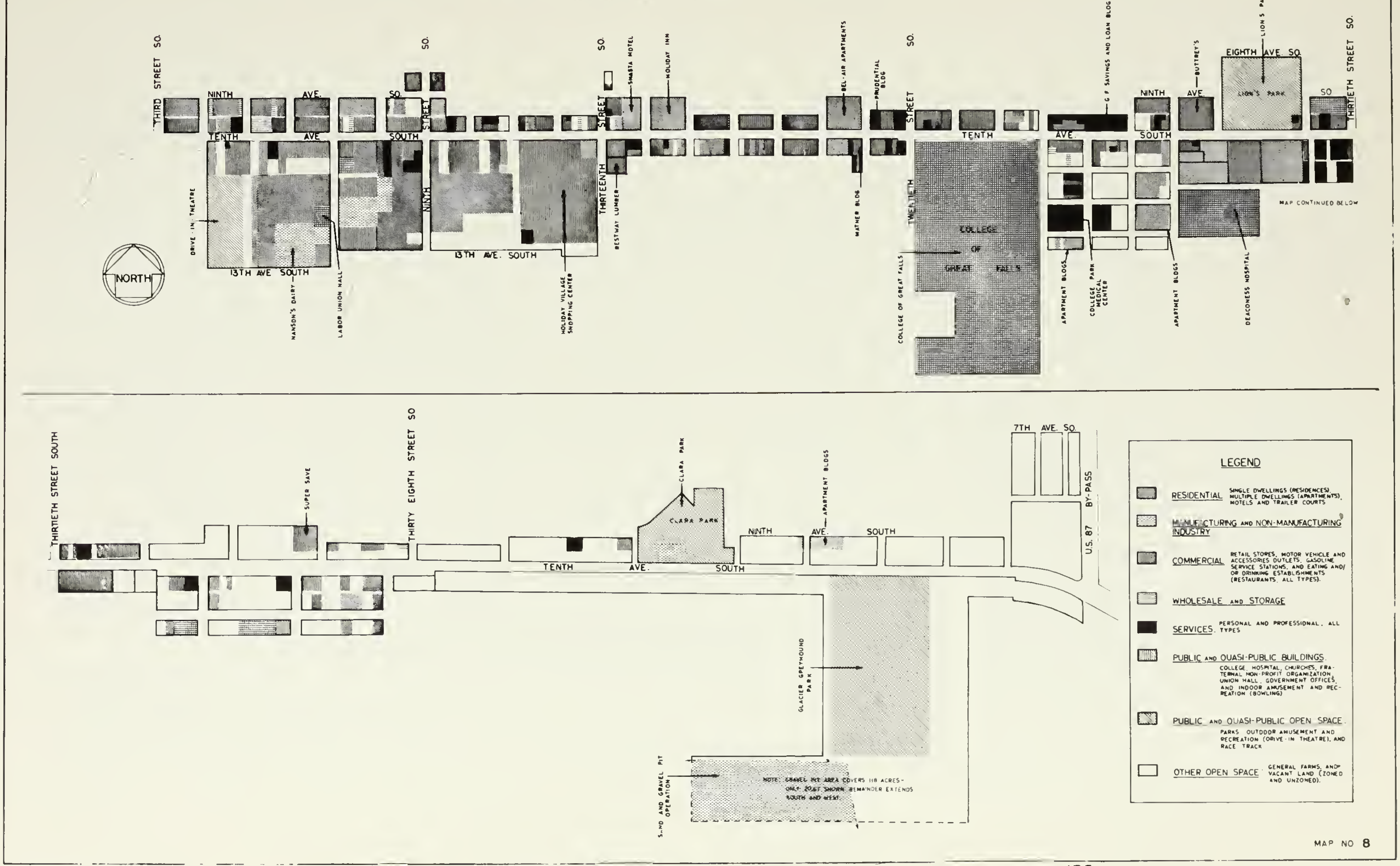
One of the more important types of activity in the Complex, if not the largest and most important, is that classified as Commercial. As used in this study---

> COMMERCIAL includes retail outlets (all types), eating and drinking establishments, auto dealers, gasoline service stations, and household trailers (sales and service).

The following summary presents the land use characteristics for Commercial and their relationship to the total land use of the Tenth Avenue Business Complex.

LAND USE BY TYPES OF LAND USE ACTIVITIES AND MAJOR IMPROVEMENTS, 1964

IN THE TENTH AVENUE BUSINESS COMPLEX


THIRD STREET SO.
NINTH AVE. SO.
TENTH AVE SOUTH
STREET SO.
13TH AVE SOUTH
13TH AVE. SOUTH
NINTH
THIRTEENTH
STREET SO.
TWENTIETH
STREET SO.
EIGHTH AVE. SO.
THIRTIETH STREET SO.
NORTH
DRIVE-IN THEATRE
HANSON'S DAIRY
LABOR UNION HALL
HOLIDAY VILLAGE SHOPPING CENTER
RESTWAY LUMBER
SHASTA MOTEL
HOLIDAY INN
BEL-AIR APARTMENTS
PRUDENTIAL BLDG
MATHER BLDG
COLLEGE OF GREAT FALLS
COLLEGE OF GREAT FALLS
APARTMENT BLDGS
G F SAVINGS AND LOAN BLDG
COLLEGE PARK MEDICAL CENTER
APARTMENT BLDGS
BUTTREY'S
LION'S PARK
LION'S PARK
DEACONESS HOSPITAL
MAP CONTINUED BELOW
THIRTIETH STREET SOUTH
SUPER SAVE
THIRTY EIGHTH STREET SO
TENTH AVE. SOUTH
CLARA PARK
CLARA PARK
NINTH AVE. SOUTH
APARTMENT BLDGS
7TH AVE. SO.
US. 87 BY-PASS
GLACIER GREYHOUND PARK
SAND AND GRAVEL PIT OPERATION
NOTE: GRAVEL PIT AREA COVERS 118 ACRES - ONLY 20.67 SHOWN REMAINDER EXTENDS SOUTH AND WEST.
LEGEND
RESIDENTIAL SINGLE DWELLINGS (RESIDENCES), MULTIPLE DWELLINGS (APARTMENTS), MOTELS AND TRAILER COURTS
MANUFACTURING AND NON-MANUFACTURING INDUSTRY
COMMERCIAL RETAIL STORES, MOTOR VEHICLE AND ACCESSORIES OUTLETS, GASOLINE SERVICE STATIONS, AND EATING AND/OR DRINKING ESTABLISHMENTS (RESTAURANTS, ALL TYPES).
WHOLESALE AND STORAGE
SERVICES. PERSONAL AND PROFESSIONAL, ALL TYPES
PUBLIC AND QUASI-PUBLIC BUILDINGS. COLLEGE, HOSPITAL, CHURCHES, FRATERNAL NON-PROFIT ORGANIZATION, UNION HALL, GOVERNMENT OFFICES, AND INDOOR AMUSEMENT AND RECREATION (BOWLING)
PUBLIC AND QUASI-PUBLIC OPEN SPACE. PARKS OUTDOOR AMUSEMENT AND RECREATION (DRIVE-IN THEATRE), AND RACE TRACK
OTHER OPEN SPACE GENERAL FARMS, AND VACANT LAND (ZONED AND UNZONED).

MAP NO 8

TABLE 11

Land Use Characteristics And Their Rank By Types of Land Use Activities (square feet)

Types of Land Use Activities		Land a/	RANK	Floor Space b/	RANK	Parking Area	RANK	Outside Storage Area	RANK	Area In Other Use	RANK	Vacant Land	RANK
I.	Residential	2,740,986	5	441,034	2	459,106	2	4,227	4	1,939,949	2	8,152	6
II.	Manuf. Indus.	288,367	8	25,800	7	248,007	6	14,560	2	0	-	0	-
III.	Non-Manuf. Indus.	5,236,381	2	11,328	8	0	-	1,000	5	5,225,630	1	7,063	7
IV.	Commercial	2,911,829	4	541,285	1	1,674,252	1	156,107	1	347,381	5	208,732	4
V.	Wholesale and Storage	78,122	9	72,975	5	25,910	7	900	6	0	-	1,780	8
VI.	Services	762,831	7	212,020	4	425,572	4	9,367	3	52,644	7	94,707	5
VII.	Pub. & Quasi-Pub. Buildings	5,349,339	1	427,007	3	442,371	3	0	-	697,582	4	3,965,406	1
VIII.	Pub. & Quasi-Pub. Open Space	2,586,784	6	28,096	6	306,000	5	0	-	1,629,264	3	623,424	3
IX.	Other Open Space	4,192,678	3	1,152	9	0	-	0	-	302,953	2	3,888,573	2
	TOTAL	24,147,317		1,760,697		3,581,218		186,161		10,195,403		8,797,837	

a/ In addition, there are 6,684,180 square feet of rights-of-way for avenues, streets and alleys. Total Land equals 30,831,497 square feet.

b/ Land Cover (first floor) of improvements amounts to 1,386,698 square feet.

Commercial Land Use Characteristics			
Characteristics	Total Complex	Commercial	Commercial as % of Total
Land	24,147,317	2,911,829	12.0%
Floor Space	1,760,697	541,285	30.7%
Parking Area	3,581,218	1,674,252	46.8%
Outside Storage Area	186,161	156,107	83.9%
Area in Other Use	10,195,403	347,381	3.4%
Vacant Land	8,797,837	208,732	2.4%

Covering only one-eighth (12%) of the land, Commercial business possess about one-third (30.7%) of the floor space in the Complex and also accounts for about one-half (46.8%) of the parking area. These data and relationships clearly emphasize the importance of Commercial business in the Tenth Avenue Business Complex.

The importance of floor space to commercially classified businesses is highlighted by the fact that its total square feet (541,285) is higher than for any of the other nine types of land use activities, including those activities which possess more land area.

A breakdown of Commercial floor space shows allocation of square feet to the following kinds of business:

	sq. ft.	percent
Retail Outlets (all types)	393,508	72.7%
Restaurants (all types)	69,745	12.8
Gasoline Service Stations	50,367	9.3
Automobile Dealers (Sales and Service)	23,257	4.3
Household Trailers (Sales and Service)	4,408	.9
	541,285	100.0%

This summary effectively shows the prominence of retail outlets within the Commercial classification with almost three-fourths (72.7%) of the floor space for all Commercial business. Retail outlets include all kinds of retail stores including super food markets, but it does not include the other four forms of customer service operations listed above separately.

Parking area of Commercial business likewise is a significant figure. Commercial accounts for nearly half (46.8%) of the parking area of the entire Complex. The nature of Commercial operations explains this rather high percent. Inasmuch as Commercial businesses depend upon customer traffic which in this age means automobile traffic, for their success, adequate parking area must be available and accessible to all shoppers who are attracted to the Commercial business. It is evident that nearly all Commercial operations in the Complex strive to satisfy the needs of customers in this regard.

8. Retail stores of all types are of major importance in the Complex. They occupy 393,508 square feet of floor space and provide 940,385 square feet of parking area for their customers.

A breakdown of Commercial parking area shows allocation of square feet to the following forms of business:

	sq. ft.	percent
Retail Outlets (all types)	940,385	56.1%
Restaurants (all types)	401,903	24.0
Gasoline Service Stations	331,964	19.9
Total	1,674,252	100.0%

In the Commercial classification, retail outlets show themselves to be of prime importance since they have over one-half (56.1%) of Commercial parking area. Restaurants (all types) or eating and drinking establishments as they are sometimes referred to, possess one-fourth (24%)of Commercial parking space since they also serve customer traffic which to-day is basically automobile. In our analysis, gasoline service stations likewise show up with a large percentage of the Commercial parking area, i.e.,19.9%. Gas stations use open space for two purposes, one for parking customer cars to be serviced and two for normal car parking service. Inasmuch as these square feet were not allocated in our analysis into Area in Other Use, gasoline service station parking area appears as a substantial figure.

The Outside Storage Area used by Commercial businesses is almost 84% of such square feet allocation in the entire Complex. Although Outside Storage Area is not very prominent throughout the Tenth Avenue Business Complex, it is necessary for large items which are of a durable nature and unable to be easily stored indoors. Practically all of the Outside Storage Area for Commercial business is in use by two specific kinds of firms, i.e., heating and plumbing supply firms, and tire, battery and accessories dealers.

Auto dealers (sales and service) and household trailer dealers (sales and service) possess 251,982 square feet, or 73% of Area in Other Use of the total 347,381 for all Commercial businesses.

Additional factors regarding Commercial businesses will be presented in Chapter IX--Specific Aspects of Selected Types of Business.

3. Services

The next land use activity Classification, and a very important one, is that of Services. As used in this study---

> SERVICES includes those classified as personal; business; financial, insurance, and real estate; medical and health; legal, engineering, and accounting; etc.

The following summary presents the land use characteristics for Services and their relationship to the total land use of the Tenth Avenue Business Complex.

Services Land Use Characteristics			
Characteristics	Total Complex	Services	Services as % of Total
Land	24,147,317	762,831	3.2%
Floor Space	1,760,697	212,020	12.0%
Parking Area	3,581,218	425,572	11.9%
Outside Storage Area	186,161	9,367	5.0%
Area in Other Use	10,195,403	52,644	0.5%
Vacant Land	8,797,837	94,707	1.1%

Floor space and parking area seem to be the most significant figures for Services. Although 12 percent of the floor space and nearly 12 percent of parking area does not compare with the much larger percentages for the Commercial classification, it is really quite substantial when one considers the nature of the two types of activities. Services, like Commercial, caters to consumers and requires floor space and parking area but unlike Commercial, Services do not have to provide facilities to accommodate large gatherings of consumers or shoppers. The flow of demand for Services by consumers can be regulated by the service organizations and thus realize a more intensive utilization of their floor space and parking area.

The following summary of floor space provides a breakdown of the businesses within the classification of services.

Floor Space By Kind Of Service		
Kind of Service	Floor Space (sq. ft.)	% of Total
Financial, Insurance and Real Estate	26,275	12.4%
Medical and Health	31,391	14.8%
Legal, Engineering and Accounting	5,080	2.4%
All Other Services	78,739	37.1%
Vacant Area	70,535	33.3%
Total	212,020	100.0%

The summary readily shows that the largest kind of service is that classified as "All Other Services," which includes services not classified elsewhere. There are numerous and varied kinds of service included but not enought of each kind to classify separately. Included are such services as barber shops, beauty shops, photographic studios, laundries, shoe repair, advertising firms, automotile repair, miscellaneous repair and service, and a private employment service. Additional factors regarding some of these kinds of service will be considered in Chapter IX--Specific Aspects of Selected Types of Business.

One third of the floor space for Services is classified as Vacant Area. This figure is very impressive and deserves an explanation. The Bureau of Public Road's Land Use Activities Code for Origin--Destination Studies (Appendix 4) does not have a code for Commercial vacant space but the Services classification does have such a code, listed as Buildings or Offices Vacant. Thus all vacant buildings and vacant offices were coded under the general classification of Services. Therefore the 33.3% representing Services' vacant area could apply to Commercial activities as well. At the moment they are vacant and whether they are Commercial or Services is a debatable question to be answered only when the area is actually occupied.

The remaining types of Services are those of prime concern, and after considering Vacant Area floor space in the preceding paragraph, the percentage for these remaining Services take on new meaning since their percentage would definitely be larger if the vacant floor space which belonged to Commercial could be taken out and the total floor space for Services reduced. The largest of the remaining types is that of Medical and Health Services. And this is due primarily to the College Park Medical Center. Financial, Insurance, and Real Estate Services follows in floor space but it is not concentrated in any one area. Instead there are many offices spread throughout the entire Complex area of Tenth Avenue South. Finally, the Legal, Engineering and Accounting Services are small in number and also spread into different areas.

4. "Multi-Business Operations" of Commercial and Service Facilities

Throughout the Tenth Avenue Business Complex the physical facilities of individual businesses are clustered together in the same structure with other unrelated business establishments. The term "Multi-Business Operations" was selected to designate those activities which are located within the same general structure or building which were built for the purpose of handling varied businesses and their variety of customers.

These "Multi-Business Operations" range from the large shopping center to the small building which serves two or three establishments. The main objective, however, of our immediate analysis was to determine the impact of the several large multi-business operations upon the entire Complex. To achieve this objective it was necessary to include along with these larger operations, the smaller ones as well. The objective was entirely feasible since these larger "business centers" account for the major percentage of the total "multi-business operations" data used for comparisons and relationships.

The following summary presents the land use characteristics of the "Multi-Business Operations" and their relationship to the total land use of the Tenth Avenue Business Complex.

"Multi-Business Operations" Land Use Characteristics

Characteristics	Total Complex	"Multi-Business Operations"	Multi-Business as % of Total
Land	24,147,317	1,149,774	4.7%
Floor Space	1,760,697	335,720	19.0%
Parking Area	3,581,218	810,427	22.6%
Outside Storage Area	186,161	2,904	1.6%
Area in Other Use	10,195,403	15,400	0.2%
Vacant Land	8,797,837	32,749	0.4%

The nature and the significance of "Multi-Business Operations" can be observed from the summary which notes that they possess about 23 percent of the parking area and 19 percent of the floor space of the Complex while using only 4.7 percent of the land. Once again we have the same type of parking area, floor space and land relationship that we observed for Commercial and Services types of activities. Thus, all of the individual establishments in the "Multi-Business Operations" are either of a Commercial or Service nature.

Carrying our analysis a step further, the following two summaries show the relationship of "Commercial Multi-Business" to total Commercial, and "Services Multi-Business" to Total Services of the entire Complex. Note that the percentage of land, floor space and parking area is especially outstanding with those of Commercial being higher than Services.

Comparison of "Commercial Multi-Business" to Total Commercial

Characteristics	Total Commercial	"Commercial Multi-Business"	Multi-Business as % of Total Commercial
Land	2,911,829	947,685	32.5%
Floor Space	541,285	274,784	50.7%
Parking Area	1,674,252	684,858	41.0%
Outside Storage Area	156,107	1,183	0.7%
Area in Other Use	347,381	14,322	4.1%
Vacant Land	208,732	13,364	6.4%

Comparison of "Services Multi-Business" to Total Services

Characteristics	Total Services	Services Multi-Business	Multi-Business as % of Total Services
Land	762,831	202,089	26.5%
Floor Space	212,020	60,936	28.7%
Parking Area	425,572	125,569	29.5%
Outside Storage Area	9,367	1,721	18.3%
Area in Other Use	52,644	1,078	2.0%
Vacant Land	94,707	19,385	20.5%

5. Residential

Another type of land use activity is that classified as Residential.

As used in this study---

> RESIDENTIAL includes motel, trailer courts, multiple dwelling units (apartment houses), and single dwelling units (residential homes).

The following summary presents the land use characteristics for Residential and their relationship to the total land use of the Tenth Avenue Business Complex.

Residential Land Use Characteristics

Characteristics	Total Complex	Residential	Residential as % of Total
Land	24,147,317	2,740,986	11.4%
Floor Space	1,760,697	441,034	25.0%
Parking Area	3,581,218	459,106	12.8%
Outside Storage Area	186,161	4,227	2.3%
Area in Other Use	10,195,403	1,939,949	19.0%
Vacant Land	8,797,837	8,152	0.1%

On a percentage basis it is apparent that the floor space of Residential is more than double that of land, i.e., 25 percent vs. 11.4 percent. This can be explained by the fact that within the Residential classification there are several very large multi-story apartment houses as well as motels. Single dwelling homes actually account for only about 25 percent of the floor space of the Residential total. Thus, apartment houses and motels account for almost the remaining 75 percent. Consequently, in the Complex they appear as substantially important activities.

Area In Other Use at 19 percent of the total Complex and Parking Area at 13 percent are impressive figures as well. The apartment houses and motels have many large courtyards, swimming pools, sidewalks and lawns, etc., as well as the single dwellings and trailer courts, which account for the high Area In Other Use percentage.

6. Public and Quasi-Public Buildings

Another interesting and heterogeneous classification of land use activity in the Complex is that of Public and Quasi-Public Buildings. As used in this study---

> PUBLIC AND QUASI-PUBLIC BUILDINGS includes a college (College of Great Falls), a hospital (Deaconess Hospital), churches, non-profit organizations (VFW, Union Temple), and indoor amusement and recreation center (Skyway Bowl).

The following summary presents the land use characteristics for Public and Quasi-Public Buildings and their relationship to the total land use of the Tenth Avenue Business Complex.

Public and Quasi-Public Buildings Land Use Characteristics

Characteristics	Total Complex	Public & Quasi-Public Buildings	Pub. & Quasi-Pub. as % of Total
Land	24,147,317	5,349,339	22.2%
Floor Space	1,760,697	427,007	24.3%
Parking Area	3,581,218	442,371	12.3%
Outside Storage Area	186,161	0	0.0%
Area in Other Use	10,195,403	697,582	6.8%
Vancant Land	8,797,837	3,965,406	45.1%

From the summary it is apparent that this type of activity looms large in the Complex. Of the entire Complex it consists of a large land area (22.2%), considerable floor space (24.3%), large parking area (12.3%), and the largest vacant land area (45.1%).

This classification covers the largest land area of all nine types of land use activity. Even more significant is that the College of Great Falls accounts for 85 percent of the 5,349,339 sq. ft. of land for Public and Quasi-Public Buildings. Since the College has only a small part of its land covered with buildings, the College also accounts for most of the vacant land in this classification which is the highest for all nine types of land use activity.

The large parking area is due to the fact that all of the establishments in this classification are built to accommodate the public and ample parking is essential. The same can be said for the substantial floor space in this classification.

7. Manufacturing Industries

Although manufacturing as an activity covers a broad spectrum of producing businesses, it is represented in the Tenth Avenue Business Complex by only two, i.e., dairy products and beverage industries.

The following summary presents the land use characteristics for these two

Manufacturing Industries and their relationship to the total land use of the Tenth Avenue Business Complex.

Manufacturing Land Use Characteristics

Characteristics	Total Complex	Manufacturing	Manufacturing as % of Total
Land	24,147,317	288,367	1.2%
Floor Space	1,760,697	25,800	1.5%
Parking Area	3,581,218	248,007	6.9%
Outside Storage Area	186,161	14,560	7.8%
Area in Other Use	10,195,403	0	0.0%
Vacant Land	8,797,837	0	0.0%

From the summary it is apparent that this type of activity is relatively small in the total Complex.

8. Non-Manufacturing Industries

Another type of land use activity to be considered is Non-Manufacturing Industries, which as used in this study, consists of a sand and gravel pit operation, several special construction companies, a radio broadcasting operation, and an electric utility booster sub-station. In physical dimensions, the sand and gravel operation loom by far the most important in this classification.

The following summary presents the land use characteristics for Non-Manufacturing Industries and their relationship to the total land use of the Tenth Avenue Business Complex.

Non-Manufacturing Land Use Characteristics

Characteristics	Total Complex	Non-Manufacturing	Non-Manufacturing as % of Total
Land	24,147,317	5,236,381	21.7%
Floor Space	1,760,697	11,328	0.6%
Parking Area	3,581,218	0	0.0%
Outside Storage Area	186,161	1,000	0.5%
Area in Other Use	10,195,403	5,225,630	51.3%
Vacant Land	8,797,837	7,063	0.1%

It can be noted from the summary that this type of activity represents over half (51.3%) of the Area In Other Use for the entire Complex. This is due chiefly to the sand and gravel pit business which covers 5,168,830 sq. ft. of land, nearly all of which is used for productive purposes. These square feet of land also account for most of the total land in Non-Manufacturing Industries which is a significant 21.7 percent of the total Complex.

9. Wholesale and Storage

Wholesale and Storage, like Non-Manufacturing Industries, is relatively unimportant in the Tenth Avenue Business Complex since it involves only a few establishments.

The following summary presents the land use characteristics for Wholesale and Storage and their relationship to the total land use of the Tenth Avenue Business Complex.

Wholesale and Storage Land Use Characteristics

Characteristics	Total Complex	Wholesale and Storage	Wholesale & Storage as % of Total
Land	24,147,317	78,122	0.3%
Floor Space	1,760,697	72,975	4.1%
Parking Area	3,581,218	25,910	0.7%
Outside Storage Area	186,161	900	0.4%
Area in Other Use	10,195,403	0	0.0%
Vacant Land	8,797,837	1,780	0.02%

10. Public and Quasi-Public Open Space

Another heterogeneous classification of land use activity in the Complex is that of Public and Quasi-Public Open Space. As used in this study---

> PUBLIC AND QUASI-PUBLIC OPEN SPACE includes two public parks, a drive-in theater, the Glacier Greyhound Park, race track, and a golf driving range.

The following summary presents the land use characteristics for Public and Quasi-Public Open Space and their relationship to the total land use of the Tenth Avenue Business Complex.

Public and Quasi-Public Open Space Land Use Characteristics

Characteristics	Total Complex	Public and Quasi-Public Open Space	Pub. & Quasi-Pub. as % of Total
Land	24,147,317	2,586,784	10.7%
Floor Space	1,760,697	28,096	1.6%
Parking Area	3,581,218	306,000	8.5%
Outside Storage Area	186,161	0	0.0%
Area in Other Use	10,195,403	1,629,264	16.0%
Vacant Land	8,797,837	623,424	7.1%

In the above data the Glacier Greyhound Park, which includes both the race track and the golf driving range, accounts for better than half of the total land in this type of activity classification. Also it represents almost all of the floor space, all of the parking area, about half of the Area In other Use and all of the vacant land.

11. Other Open Space

The final type of land use activity to be considered is classified as Other Open Space. This classification includes all "general farms" and "open vacant land."

Open Vacant Land is a Bureau of Public Road's classification or code title (see Appendix 4) for a specific type of land. It represents an entire area of land which has not been designated for a specific use at the present time. The entire land is just vacant.

Open Vacant Land should not be confused with the land use characteristics of "vacant land" used to describe a part of all BPR land classifications analyzed previously in this chapter. All of the eight classifications of land use considered up to now in this chapter had a designated purpose, i.e., Commercial, Services, Non-Manufacturing Industries, etc. However, a specific piece of land property may have its land allocated to any one of the six land use characteristics, including part of the whole piece of property in "vacant land."

The following summary presents the land use characteristics for Other Open Space and their relationship to the total land use of the Tenth Avenue Business Complex.

Other Open Space Land Use Characteristics

Characteristics	Total Complex	Other Open Space	Open Space as % of Total
Land	24,147,317	4,192,678	17.4%
Floor Space	1,760,697	1,152	0.1%
Parking Area	3,581,218	0	0.0%
Outside Storage Area	186,161	0	0.0%
Area in Other Use	10,195,403	302,953	3.0%
Vacant Land	8,797,837	3,888,573	44.2%

The classification of Other Open Space, consisting of general farms and open vacant land, accounts for a considerable amount of land area, namely 4,192,678 sq. ft. or 17.4% of the entire Complex. While general farms comprise about 6 percent of this class, open vacant land represents the remainder.

IX. SPECIFIC ASPECTS OF SELECTED KINDS OF BUSINESS

Once the investigation began on the Tenth Avenue Business Complex it was decided that some businesses had distinct aspects that could best be analyzed by special questions. The questions are found on the back side of the Survey Analysis Sheet (See Appendix 2). The specific kinds of business that were singled out are found in ten separate sections on the Survey Analysis Sheet. The questions asked are those peculiar to that business.

The sections and the information relating to the Selected Kinds of Business are as follows:

A. Restaurants: In this section the information gathered related to seating capacity, hours of service, daily number of customers, and type of operating licenses.

B. Motels: Number of rooms, dining facilities, and type of operation.

C. Auto Service Stations: Hours open, number of pumps, stalls, mechanics, as well as other facilities offered to the customer.

D. New and Used Car Operations: Number of new and used automobiles available for sale.

E. Professional Services: Types of varying professional services in the Complex.

F. Multiple Dwellings (Apartments): Apartments, type, occupied and vacant.

G. Mobile Homes--Sales: Number of new and used trailers for sale.

H. Mobile Homes--Trailer Courts: Trailer courts, location, vacant and occupied.

I. Personal Services and Self-Service Laundries: Barber and Beauty Shops, space and services offered; Number of self-service washers, dryers, and dry cleaning units.

A. Restaurants

There are 26 Restaurants listed in the Tenth Avenue Business Complex. This includes restaurants with and without beer and liquor, drive-in's as well as cafeterias. The total seating capacity of all types of restaurants is approximately 1,900 customers. The restaurants with liquor and beer have the largest seating capacity. These "Nite Club" restaurants generally seat between 100 and 250 customers. A newly constructed establishment under the "Nite Club" classification is not in the total figure. This would add an additional 300 seating capacity to the total figure.

Seating and Car Capacity---Restaurants and Drive-In's

Restaurants		Restaurants		Drive-In's	
Seating Capacity	Number	Seating Capacity	Number	Car Capacity	Number
250	1	80	1	50	1
200	2	75	1	44	1
168	1	70	1	30	2
164	1	60	2	20	1
152	1	50	1		
150	1	37	2		
120	2	25	1		
100	1	18	1		
		13	1		
Total			21	Total	5

The hours of service vary but 3 of the restaurants offered 24 hour service. Most restaurants operated on a 12 hour basis with the rest open for various hours such as 20, 18, 17, 16, 15, 13, 9, and 8.

Hours of Service----Restaurants and Drive-In's

Hours of Service	Number	Hours of Service	Number
24	3	15	1
20	1	13	1
18	2	12	9
17	1	9	6
16	1	8	1
Total			26

Of the 26 restaurants, 11 had both liquor and beer licenses; 2 had licenses to sell beer only. The remaining 13 were restaurants, drive-ins and cafeterias without liquor or beer. Half of all the eating establishments in the Complex served alcoholic beverages with their dinners.

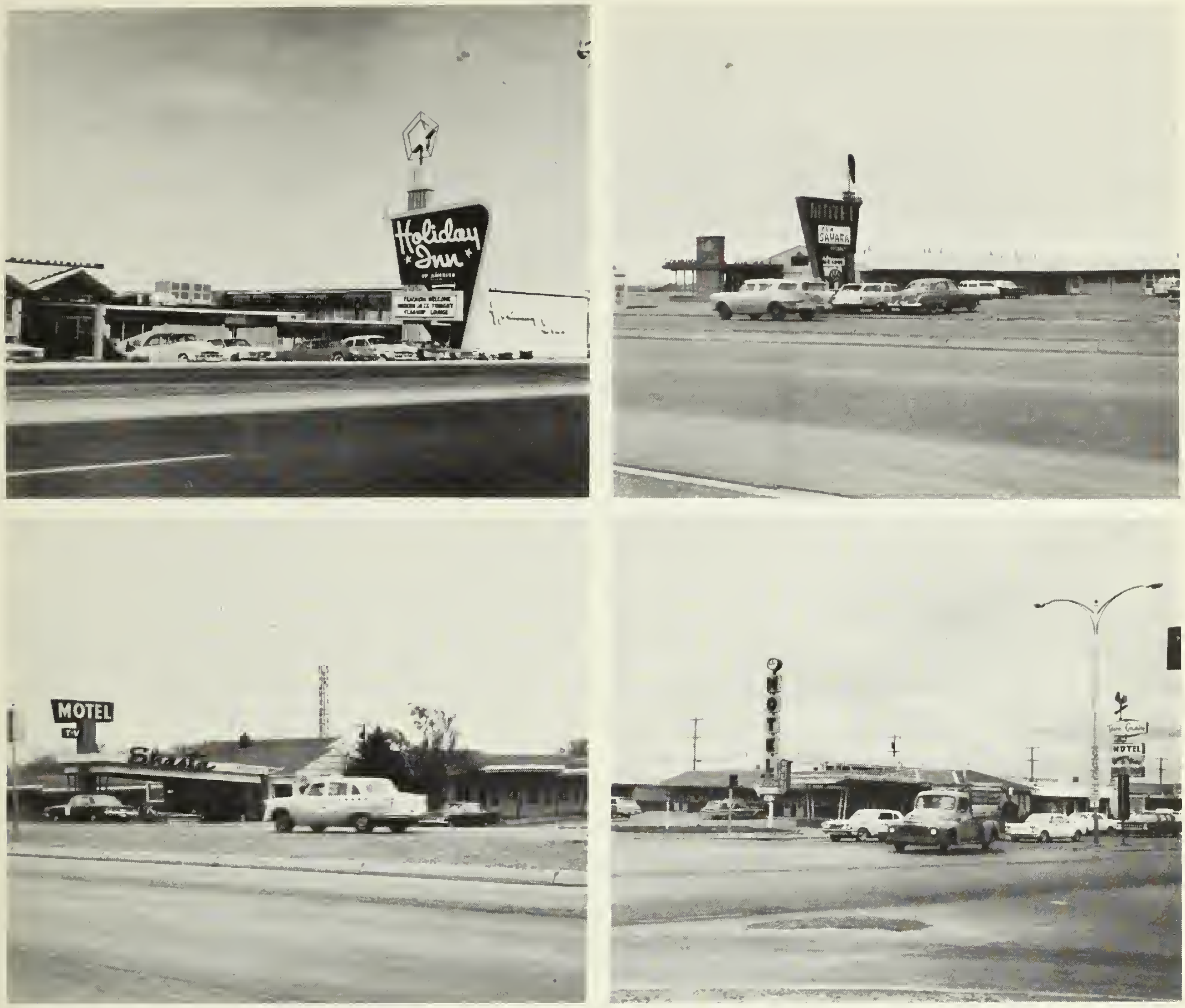
It was difficult for us to come up with an average figure for the number of daily customers each business served. Most businesses did not consider this as a criteria, rather they based business on the daily cash receipts. So our replies to this question about the number of daily customers were mostly "do not know" or "not available." Most businesses, however, said that at the peak hours of breakfast, lunch and dinner, their establishments were filled to capacity. The "Nite Club" type restaurants, however, relied on evening dinner crowds, and week-end business to reach capacities. The drive-in type restaurants are seasonal, but 3 of the 5 remain open all year. The peak business, of course, is from May through September.

9. Of the 26 eating and drinking establishments, 21 are restaurants of which several are of the Supper or "Nite Club" type. The 5 Drive-In's have a car capacity of 174 cars.

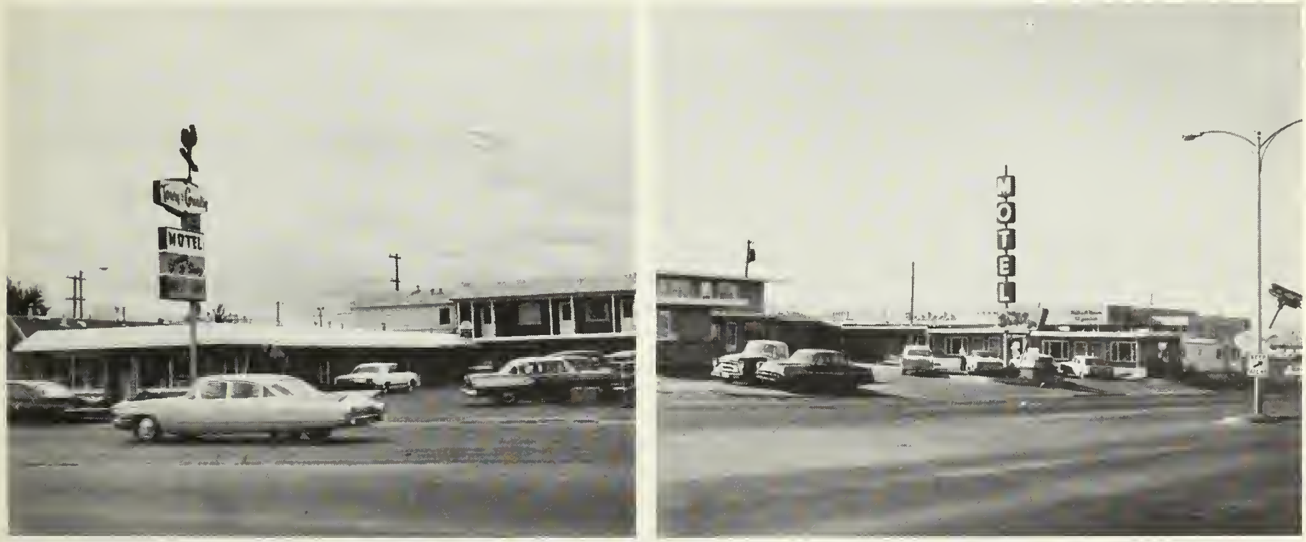
B. Motels

There are 12 motels in the Complex. They are distributed geographically throughout the Complex and are located in half of the twelve areas. The location of motels ranges from 4th Street to 34th Street with 4 of the 12 motels in Area #8 in the vicinity of 24th, 25th, and 26th Street.

The 12 motels offer a total of 323 rooms to travelers in the area. The motels vary in size from the smallest which consists of 5 units to the largest which has 110 units. 2 of the motels offer complete dining facilities; the rest rely on near-by restaurants and drive-ins. Only one of the motels is affiliated with motels in other cities and states. 11 listed themselves as independent operators.



10. The 12 motels on Tenth Avenue South offer 323 rooms to travelers. The motels vary in size from the smallest which consists of 5 units to the largest which has 110 units.



C. Auto Service Stations

Automobile traffic on Tenth Avenue South is served by 23 service type stations that have gasoline pumps, and are commonly known as gas and oil service stations. In the group almost all of the major gas and oil companies are represented. In addition there are 8 auto dealers who service and repair automobiles but are not engaged in the normal gas and oil service station business.

The 23 service type stations have a total of 120 pumps which sell regular gasoline at prices between 30.9 cents to 35.9 cents per gallon, and premium gasoline at prices between 37.9 cents and 40.9 cents per gallon.

The Survey Analysis Sheets asked for the number of stalls available for auto repair and service work as well as the availability of automobile mechanics. The results showed 105 stalls and 54 mechanics available in both the service type stations as well as the auto dealers. The auto dealers account for 10 of the mechanics, and of these 6 are in special services such as transmission repair, welding, etc.

Many service stations also offer other services such as auto washes, wrecker, pick-up and delivery, U-Haul rental, and sale of sporting equipment.

The hours that the service stations operate vary, but most of them open at 7 a.m. daily and remain open until at least 10 p.m. There are 3 stations in the Complex that remain open on a 24 hour basis.

Hours of Service----Auto Service Stations

Hours of Service		Number of Stations
24		3
17		2
15		11
14		6
13		1
11		1
10		2
9		2
8		3
	TOTAL	31

11. Twenty-three service type stations with 120 gas pumps and 8 auto dealers service and repair automobiles. These operations provided 105 stalls and 54 mechanics available for auto servicing.

D. New and Used Car Operations

The New and Used Car Operation shows that the Tenth Avenue Business Complex encourages this type of business. There are 10 New and Used Car Dealers represented in this study. At the time of the interviewing these dealers had a total of 54 new model automobiles and 334 used cars which were mostly of a late model vintage. Several other used car lots have opened since our Survey Analysis Sheets were completed.

12. Ten new and used car dealers are located in many parts of the Complex. Several tire service dealers are in the area offering complete tire service for the motorist.

E. Professional Services

This section includes a wide range of professional services available to the community and surrounding areas. The term Professional services in this report includes, doctors, dentists, lawyers, bankers, engineers, and accountants. In general, the professionals are located in many parts of the Complex with most of the medical profession occupying facilities in Area 8.

In Area 8 (20th Street to 30th Street, South Side), a large medical center is located. It is a few blocks from the new Montana Deaconess Hospital and across the street from the College of Great Falls. In the Medical Center there is a medical clinic as well as private practicioners. The Center was established in 1961, about three years before the completion of the new Deaconess Hospital. Since the completion of the hospital, this part of the Complex can be viewed as a medical area.

The following summary gives a breakdown of the types of medical specialties practiced throughout the Complex, but does not include the medical personnel of the new Deaconess Hospital which was not opened until the spring of 1965.

Speciality	Number	Speciality	Number
General Medicine Practice	3	Pediatrics	1
Internal Medicine	3	Psychiatry	1
General Surgery	2	Radiology	1
Eye Surgery	1	Oral Surgery	1
Neurosurgery	1	Orthodontist	1
Orthopedic Surgery	1	General Dental Practice	5
Thoracic Surgery	1	Child Dental Clinic	1
Urology and Surgery	1	Dispensing Optician	1
Neurology	1	Optometrist	1
Obstetrics and Gynecology	2	Veterinary Medicine	1

Other professionals located in the Complex do not represent as large a group as the doctors. Among the other professional services are two Consulting Engineering firms, two Attorney-at-Law offices, and two Certified Public Accounting Offices. In addition, at the time of the field survey the financial business was represented by a large branch office of a Savings and Loan Association, whose main office is located in downtown Great Falls, as well as two financial planning service organizations.

13. Many professional services are provided for including doctors, dentists, lawyers, bankers, engineers, accountants, etc. Above, left, the College Park Medical Center is the headquarters for many doctors in the area. Above, right, the Mather Building provides office facilities for a variety of service offerings.

F. Multiple Dwellings (Apartments)

In recent years, apartment houses have been appearing in increasing number in the Complex. At the time of our field survey there were 22 apartment type, multiple dwelling buildings in the Complex. These multiple dwellings included separate apartment units ranging from 2-unit buildings to 60-unit buildings.

The following summary shows the range in size of apartment house buildings as well as the number of apartments. The number of bedrooms in each apartment was obtained in order to judge the size of the apartment units.

	Number of		Bedrooms		
Size of Dwelling	Dwellings	Apartments	1	2	3
2 units (duplex)	1	2	--	--	2
3 units	1	3	--	3	-
4 units	15	60	15	45	-
5 units	1	5	--	4	1
9 units	1	9	7	2	-
10 units	1	10	10	--	-
50 units	1	50	18	26	6
60 units	1	60	--	54	6
Total	22	199	50	134	15

Thus, in the 22 multiple dwelling buildings in the Complex, there are 199 apartment units. Of these, 50 are 1-bedroom units, 134 are 2-bedroom units, and 15 have 3-bedrooms.

Of the 199 apartments, 190 were occupied and 9 were vaqant at the time of the interviewing. The 9 vacant apartments were of the two-bedroom type which had been rented but the renters had not moved in as yet.

14. There are 22 apartment type, multiple dwelling buildings in the Complex. These buildings have from 2 to 60 apartments so that there are in total 199 apartment units.

G. Mobile Homes--Sales

There are 5 trailer sales outlets in the Complex and at the time of the field survey these 5 outlets had 65 new trailers for sale and 33 used trailers.

H. Mobile Homes--Trailer Courts

In this section, there are 3 large courts with a total of 84 trailer locations. At the time of interviewing, 67 of these locations were occupied and 17 were vacant.

I. Personal Services and Self-Service Laundries

Under this section, special questions were directed at barber shops, beauty shops, and self-service laundries. Many other kinds of personal services are offered in the Complex but special questions were not directed at them. Among the other kinds of personal services offered are TV and radio repair, electrical contractors, electronic sales, insurance, real estate, pharmacists, music lessons, and services of business machine operations as well as credit adjustment bureaus.

In the Complex there are 7 barber shops with 19 chairs, and 3 beauty shops with 20 chairs.

The following summary presents the facilities of the self-service laundry and dry-cleaning establishments.

Tenth Avenue Address	Washers	Dryers	Dry Cleaning Units
1920	20	10	-
2309	25	7	8
2525	22	8	4
3021	21	8	4
Total	88	33	16

15. Personal services facilities of many types are in the Complex including 4 self-service laundry and dry cleaning establishments, 7 barber shops, and 3 beauty shops.

X. BRIEF HISTORICAL BACKGROUND AND DEVELOPMENT OF GREAT FALLS

It is the purpose of the first part of this chapter to present a brief historical background. Appendix I, The History of Great Falls, contains an extended treatment of the founding and development of the City.

A. Early Background

The City of Great Falls was established at its location in north central Montana because near its site the Missouri River in a series of descents has an aggregate fall of 526 feet. The name Great Falls is derived from this series of waterfalls of the Missouri River which extend about 15 miles downstream from the city.

Three of these waterfalls, which lie nearest the city, were named Black Eagle, Rainbow and Great Falls by Lewis and Clark as their expedition passed along the banks of the Missouri River in 1805. Although the area may have been visited by trappers and explorers prior to 1805, the first recorded visit of white men occurred with the Lewis and Clark expedition. Prior to this time the land was inhabited by the Blackfeet Indians, and the vast expanse of territory was open-range, especially for herds of buffalo.

Following Lewis and Clark's success, the Missouri River and its surrounding area became the site for considerable fur trapping and trading activity. Trading forts were established in many locations along the river, and in 1846 a trading fort was set up at Fort Benton, about 40 miles downstream from the future site of Great Falls. Between these two points, the 5 falls of the Missouri River were located, making the river unnavigable above Fort Benton.

The discovery of gold in Montana brought in many prospectors, miners, and settlers. Because of its location, Fort Benton became a boom town and in 1867 handled an estimated 10,000 riverboat passengers who were passing through to areas further west.

During this period of the nineteenth century, the Great Falls area was relatively inactive because of its inaccessibility from regular travel routes.

Paris Gibson, an engineer from Minneapolis, is credited with the founding of Great Falls. Arriving in Fort Benton in 1879, Gibson tells us in one of his writings that while reviewing a copy of Lewis and Clark's records and maps he noted the waterfalls of the Missouri River and decided to visit them. In 1880, he visited for the first time the site that was to become the future city of Great Falls.

He recognized the industrial potential of the area with its undeveloped water power and much-discussed construction of the extention of Great Northern Railway's inevitable westward extension through the northern part of the state.

Gibson received the financial backing of James J. Hill, President of the Great Northern Railway. Together, these two men organized in 1884 the Great Falls Water Power and Townsite Company which became the owner of 12,000 acres in the region about the falls. A townsite of 3,500 acres was designed which had moderately wide streets with a grid-system layout and service alleys throughout most of the city. Also in the original townsite, 700 acres were dedicated to public parks, a foresight that has been characteristic of the planning of Great Fall's "additions" development as the city has expanded over the decades.

The first election in the townsite of Great Falls (Precinct 4, Choteau County) was held November 21, 1886. In September, 1887, Cascade County was established by a bill which passed the Territorial legislature and received Governor Preston H. Leslie's signature.

In March, 1888, the Cascade County commissioners were petitioned to call an election for the incorporation of Great Falls as a city. In early October, 1888, after the incorporation election, the county commissioners declared Great Falls to be a city of Second Class. The first regular city election was held on November 12, 1888, and Paris Gibson was elected the first mayor of Great Falls.

B. Early Business Development

Industrial growth and development of Great Falls in its early years included a dam and hydro-electric plant at Black Eagle, a smelting plant, a flour mill, and a meat-packing plant. Completed in 1892, the original copper reduction plant above Black Eagle falls was the main source of employment in the area. This plant operated until 1916 when it was replaced by modern electrolytic copper and zinc refineries. Also, a wire and cable mill was added to the company's facilities at this time.

By 1890 the population of Great Falls had reached 3,979, and by 1900 it almost tripled to 14,390. Following a slight decrease between 1900 and 1910, the city has experienced a steady growth in population during the succeeding decades. Population of Great Falls, according to the Bureau of the Census, from 1890 to to 1940 was as follows---

1890	3,979
1900	14,390
1910	13,948
1920	24,121
1930	28,822
1940	29,928

Much of the growth of the city can be attributed to the installation of several hydro-electric dams at the various falls of the Missouri River for the generation of electric power. Harnessing the readily accessible water power of the Missouri began in 1891. The Black Eagle Dam was in operation the following year, and in 1927 it was reconstructed. Other dams were added in 1910, 1916, 1930 and 1958.

Through the First World War years, Great Falls expanded as new dams were built and war uses called for more and more copper. In the 1920's, with the demand for copper declining from war-time requirements, Great Falls still retained its growth and prosperity because of its position as the center of a large agricultural area in north-central Montana with wheat and livestock as the principal products.

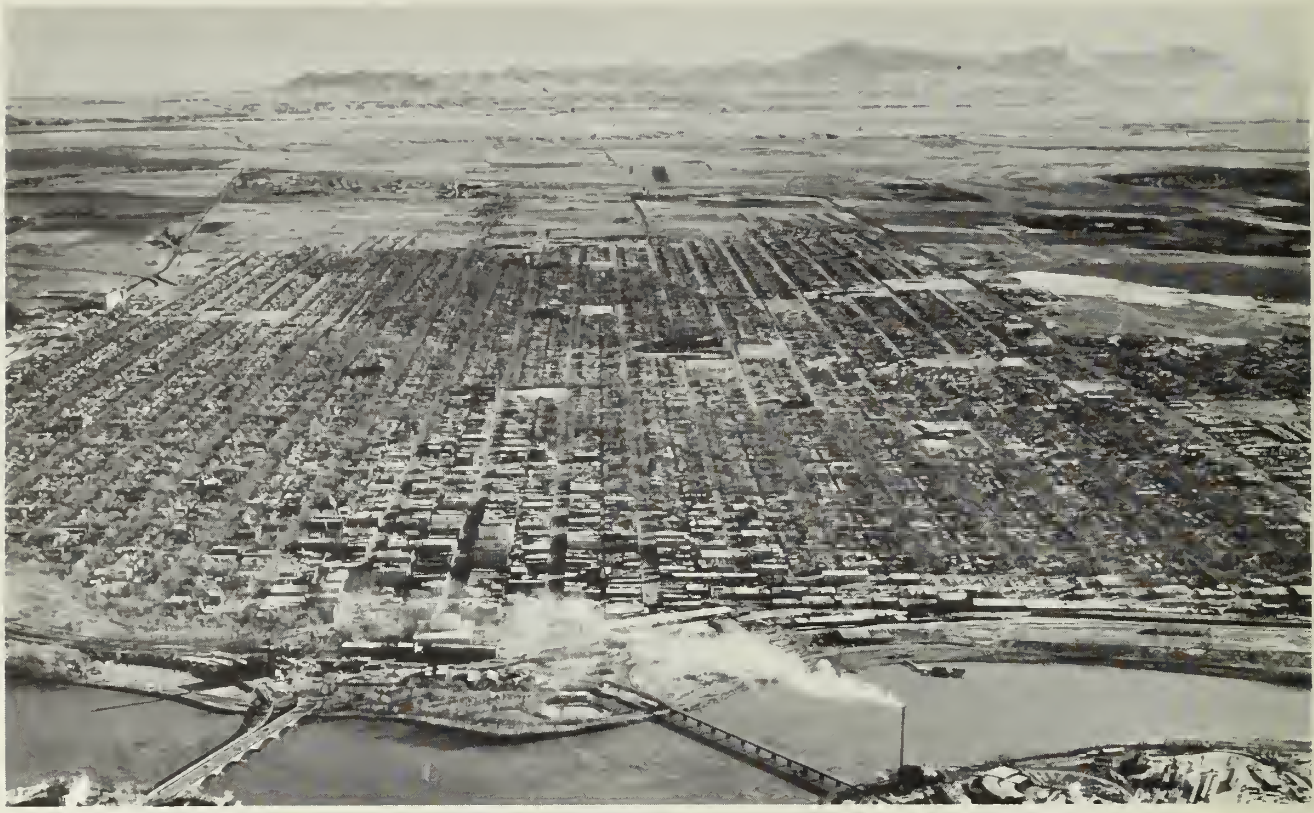
C. Later Business Development

Over the decades Great Falls has developed into a steadily growing industrial, agricultural, commercial (wholesale and retail) and entertainment center of north-central Montana. Because of its location, it has become known as an important convention, trade and medical center.

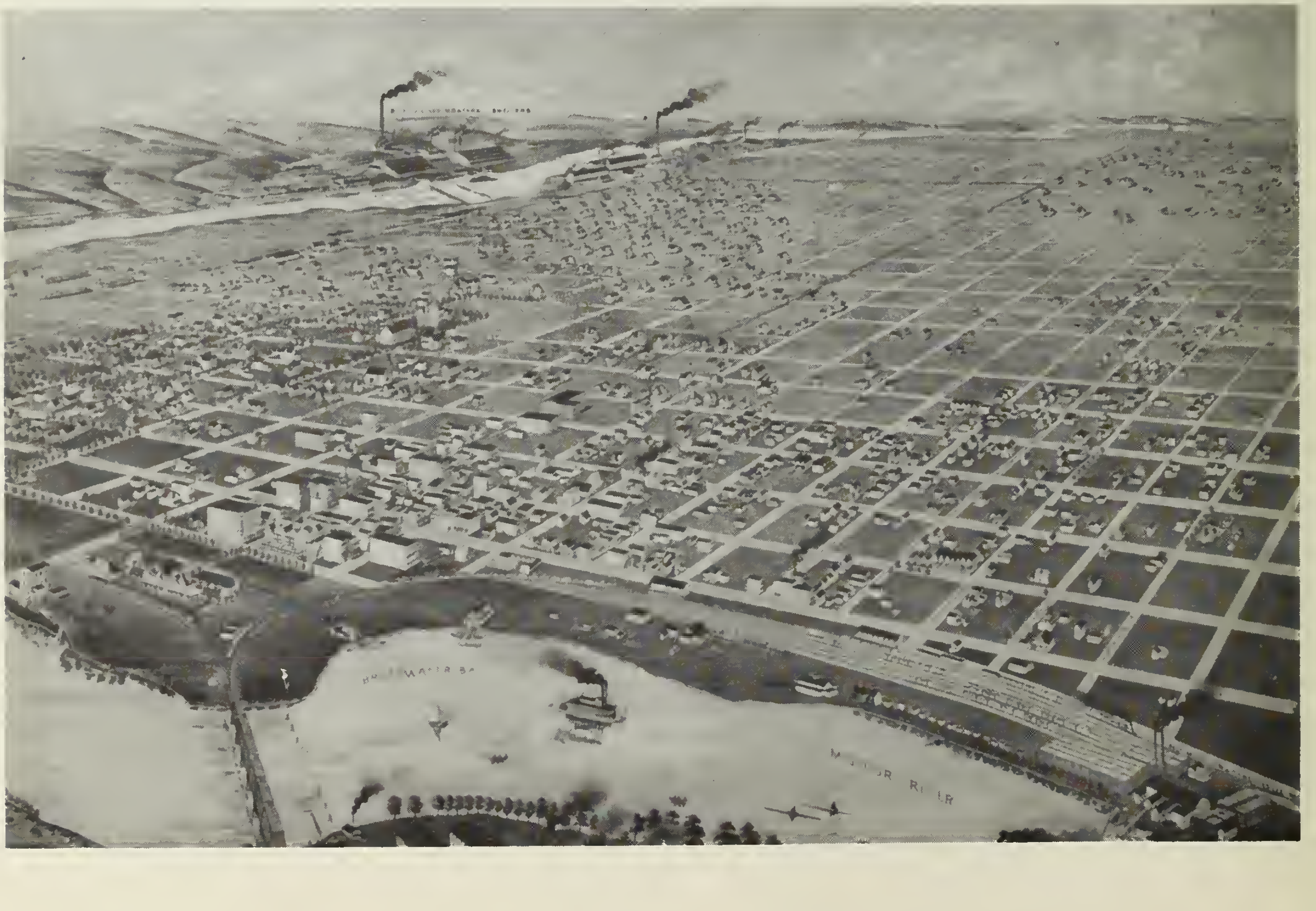
With its abundant power, Great Falls has been identified as the "Electric City." At the present time, power production capacity from the five hydro-generating plants in the vicinity of the city amounts to 230,000 kilowatts. In addition, it is now possible because of the development of high voltage transmission lines to receive in the city an unlimited volume of electric power developed at dam sites in the mountains to the west.

This abundance of power has encouraged some diversified industrial development in the Great Falls area. In addition to Anaconda Copper Mining Company's copper refinery with a capacity of 30 million pounds a month, its zinc slab plant with a capacity of 27 million pounds a month, as well as its copper and aluminum rolling mills, other businesses of major importance include the large railroad yard and shops of the Great Northern Railway and the large flour mills of the Montana Flour Mills Company and General Mills, Inc. which have a combined wheat storage capacity of 2,300,000 bushels. Montana Flour Mills' daily production is 3,800 hundred weights of flour. Flour for commercial bread baking is the major product. The firm also operates a high-capacity automated feed plant which utilized local grains in the production of high-quality formula feeds. General Mills produces 3,200 hundred weights of flour per day. This is the only plant in Montana to process durum flour, used in the manufacture of spaghetti and

CITY OF GREAT FALL: 1964 AND 1891



16. Above, 1964 aerial view of City of Great Falls with Tenth Avenue South in upper right hand corner. Below, 1891 Perspective Map of Great Falls with Tenth Avenue South as vertical avenue on extreme right. (Above photo courtesy of DeMier Photo Studio.)



macaroni. The city is also the site of several meat processing plants (Needham Packing Company, Great Falls Meat Company), a brewery (Great Falls Brewery), an oil refinery (Phillips Petroleum Company), as well as the normal complements of smaller industrial plants.

The importance of agriculture to Great Falls is reflected in the many business establishments and related facilities that are associated with agriculture and livestock raising. Numerous agricultural equipment distributors and dealers have establishments in the city. It is estimated that a very large percentage of the grain produce in Montana is processed through the Great Falls mills. The importance of the marketing of livestock to the area is evidenced by the year around activities of the livestock auction center (Great Falls Livestock Commission Company). There are 1,033 farms or ranches in Cascade County covering a land area of 2,673 square miles. The average ranch has 1502.8 acres with an average value of $78,140 for land and buildings. The number of irrigated farms total 287, and have a total irrigated acreage of 13,737 acres.

Also contributing to the growth of Great Falls has been a never-failing, always present, source of water supply from the Missouri River, the location of oil and natural gas fields to the north, and coal deposits adjacent to the city. The area between the City of Great Falls and the Alberta border has produced more than a third of a billion dollars in oil. There are 20 oil fields in the region with about 3000 producing wells with an output of 184,000,000 barrels. The more important of the fields is Cut Bank with an output of over $180,000,000.

Regarding climate Montana is normally thought of as a frigid state. Because of its favorable altitude of 3,333 feet and location on a plateau in north—central Montana, Great Falls has an average temperature in January of 23.6 degrees F and in July of 69.0 F. The growing season is 139 days and annual precipitation is 15.21 inches.

Business development has been assisted over the years by transportation facilities in the form of highways, railroads, and an airport. The two railroads, four bus lines, and nine truck lines utilize the highways and railways in serving the passenger and business freight needs of the area.

The area also benefits from the Great Falls International Airport which serves five commercial airlines with about 14 scheduled flights per day. Other principal facilities at the airport include a district weather forecast center, Federal Aviation Agency radar traffic control base, and the headquarters for the Montana Air National Guard. Complete facilities for private plane maintenance, jet fuel, rental, charter trips and flight schools are maintained.

Malmstrom Air Force Base, located just east of Great Falls, is an all important station of the Strategic Air Command. It is the support base for the nation's first minuteman wing of 150 missiles and 15 launch control centers. Having 25 percent of the nation's 600 minuteman missiles in operational readiness, MAFB is not only the keystone of our security in the north-central states but also of the country.

To emphasize this importance, MAFB in late 1964 was selected to have installed an additional 50 minuteman missiles and 5 launch control centers. This improvement would bring MAFB intercontinental ballistic missile power to 200 missiles and 20 launch control centers. While the present missiles are spread across north-central Montana, the new missile installations are to be grouped north and west of Great Falls. Each missile carries a nuclear warhead of about one (1) megaton in power.

During 1964, MAFB expenditures added about $45 million to the area's economy It is forecast that these expenditures will increase to $75 million in 1965 and to $90 million in 1966.

The military and civilian personnel of the air base is reported to be 6300. When the additional missiles are completed the total military and civilian base personnel is expected to be 8,500 in 1966. Largely because of the existence of the air base and its military personnel with their dependents, the city of Great Falls population which in 1964 was estimated at 62,607 can be viewed on a metropolitan area basis at 72,190. The air base is very important in establishing Great Falls as the largest city in Montana.

It has been estimated that the trade area of Great Falls extends over 20 counties with a population of 242,000. The annual agricultural income of these counties has been estimated to be $208,000,000. The primary trade area covers 12 of these 20 counties and has a population of 166,000. In addition, Great Falls business volume benefits from the city's proximity to Canada, being only 120 miles from the Alberta Province, Canada, border, and it is estimated that 5 percent of the area's business comes from Canadian sources.

Appendix 6-Business Activity in Great Falls and U. S. Bureau of Census Surveys summarizes the latest statistical information.

D. Population: City of Great Falls and Cascade County

The City of Great Falls, located in Cascade County, has experienced since its founding in 1884 a greater percentage increase in population than either Cascade County or the State of Montana.

The following summary presents a comparison of the population growth for Great Falls, Cascade County, and Montana.

Population Growth

Year	Great Falls	Cascade County	Montana	Percentage Increase from 1940: Great Falls	Percentage Increase from 1940: Cascade County	Percentage Increase from 1940: Montana
1890	3,979	8,755	142,924			
1900	14,390	25,777	243,329			
1910	13,948	28,833	376,053			
1920	24,121	38,836	548,899			
1930	28,822	41,146	537,606			
1940	29,928	41,999	559,456	100	100	100
1950	39,214	53,027	591,024			
1960	55,357	73,418	674,767	185	175	121

Source: Bureau of the Census

From 1940 to 1960 the population growth amounted to 85% for Great Falls, 75% for Cascade County, and 21% for Montana.

During the last decade, 1950 to 1960, the population of Great Falls increased by 41%, Cascade County by 38% and Montana by 14%.

In 1940, the beginning year of our study, Great Falls had within its city limits 71% of the population of Cascade County. By 1960, this proportion had increased to 75%.

Appendix 1 sets forth an explanation of an estimate of 1964 population for the City of Great Falls and its Metropolitan Area, prepared by the Great Falls Chamber of Commerce. They conclude that from 1960 to 1964 the City of Great Falls experienced a population increase of 7,250, or 13%, bringing the total population within the City limits to 62,607. To make a population forecast for 1964, it was necessary for the Chamber to estimate the number of household vacancies. If the number of household vacancies was underestimated, then the 1964 population estimate could be overstated.

Inasmuch as the business and service facilities of the City are available to population immediately adjacent to the city boundaries, they also constructed population estimates for a Metropolitan Area. The concept of the Metropolitan Area includes the population of (a) the city of Great Falls, (b) the town of Black Eagle, (c) the military personnel and their dependents living on Malmstrom

AFB proper, and (d) certain minor adjacent areas, such as Donovan Park. Population on a Metropolitan Area basis for 1964 was estimated to be 72,190 by the Chamber of Commerce. Thus, it can be viewed that 87% of the Great Falls Metropolitan Area population live within the city boundaries while 13% live in immediately adjacent areas.

E. Future Population of Great Falls

As a phase of the federal highway program, it is incumbent upon cities in the nation in order to participate in the financial aid of the program to estimate their future population and motor vehicle traffic growth and to plan highway resources to handle this future development.

In this regard, the Montana State Highway Commission in 1961 undertook a study of the urban transportation problem of the City of Great Falls. Volumes 1, 2 and 3 have been issued and they present the statistical details of current traffic patterns in the city. Volume 4 which deals with conclusions and recommendations will be released in the fall of 1965. This volume will present the following population data for the United States, the state of Montana, and Cascade County.

Population of U.S., Montana, and Cascade County

Year	Population			Percent	
	United States	Montana	Cascade County	Montana as % of U. S.	Cascade Co. as % of Montana
1940	131,669,275	559,456	41,999	.425%	7.51%
1950	150,697.361	591,024	53,027	.392%	8.97%
1960	178,464,236	674,767	73,418	.378%	10.88%
1981	257,068,000	875,000	126,000	.341%	14.40%

Source: U.S. Bureau of the Census.

1981--U.S. and Montana estimates are averages of high and low fertility rates from 1963 U.S. Statistical Abstract.

1981--Cascade County estimated by Montana State Highway Commission.

It is apparent from the data that as the United States has grown in population from 1940 to 1960, Montana likewise increased in absolute size but not at as fast a rate as the United States.

On the other hand, Cascade County as a part of the state has not only increased in absolute size but has grown faster than the state, and thus has become a more important and vital part of the state of Montana. This is evident in the relationship data which shows that from 1940 to 1960 the population of Cascade County as a percent of the state increased from 7.51 percent to 10.88 percent.

As Cascade County has grown faster in population size in relation to the state so also has the City of Great Falls grown in population size relative to the County. The following summary brings out this relationship.

Population of Cascade County and City of Great Falls

	Population		Percent
Year	Cascade County	City of Great Falls	Great Falls as % of Cascade County
1940	41,999	29,928	71.3%
1950	53,027	39,214	74.0%
1960	73,418	55,357	75.4%
1981	126,000	100.000	79.4%

Source: 1940-1960 U.S. Bureau of the Census.

1981-for Cascade County estimated by the Montana State Highway Commission.

It is our judgment that the population of the City of Great Falls for the year 1981 will be in the area of 100,000. This conclusion is based upon a consideration of the preceding absolute and estimated population data and the trends of relationships involved.

In population this means that while Great Falls increased by 25,429 from 1940 to 1960 (29,928 to 55,357) the absolute increase from 1960 to 1981 will be 44,643 (55,357 to 100,000).

XI. ECONOMIC GROWTH INDICATORS OF GREAT FALLS DEVELOPMENT

A. Summary of Indicators Presented in Report

In the preceding chapters of this report many comparisons have been developed. Among the more important relationships were those pertaining to population, motor vehicle registration, building permit valuations, and real property assessment valuations.

The following summary shows the percent increase for these economic growth indicators for the period from 1940 to 1964.

	Percent Increase	
	1940=100	1964
POPULATION		
State of Montana	100	121
Cascade County	100	175
City of Great Falls	100	185
MOTOR VEHICLE REGISTRATION		
State of Montana	100	213
Cascade County	100	301
BUILDING PERMIT VALUATIONS		
City of Great Falls		
(average year: 1940-1944)	100	---
(average year: 1960-1964)	---	1,363
REAL PROPERTY ASSESSMENT VALUATION		
Cascade County	100	220
City of Great Falls	100	330

The main purpose of this chapter is to present for the City of Great Falls some other economic characteristics which are indicative of the growth and development of the area. Table 12--Selected Economic Indicators of Great Falls Growth, 1940-1964--at the end of the chapter summarizes the actual data and the percent increase from 1940 of all the series considered.

B. Other Important Economic Indicators

	1940=100	1964
ELECTRICITY		
Total Consumption	100	676
Residential	100	783
Commercial	100	726
Industrial	100	398
Other	100	854
Total Customers	100	218
Residential	100	220
Commercial	100	187
Industrial	100	242
Other	100	925
NATURAL GAS		
Total Consumption	100	528
Residential	100	362
Commercial	100	560
Industrial	100	*
U. S. Gov. Agencies	100	*
Meters in Use	100	298
*Abnormal percent increase due to small base in 1940. See Table 12 for actual data.		
WATER		
Total Consumption	100	179
Total Consumers	100	262
Private Consumers	100	262
Public Consumers	100	265
TELEPHONE OWNERSHIP AND CALLS		
Total Owners	100	450
Residents	100	504
Business	100	353
Telephone Toll Calls		
Total Long Distance Calls	100	2060
FINANCIAL		
Bank Debits		
State of Montana	100	631
City of Great Falls	100	744
Total Deposits of Commercial Banks (City of Great Falls)	100	787
Loans and Discounts of Commercial Banks (City of Great Falls)	100	1,772

1. Electricity

The data on kilo-watt hours of electricity consumption and the number of electricity customers have been furnished through the courtesy of The Montana Power Company. Electrical consumption is measured by the unit known as the kilowatt hour which is the amount of electrical power required to light a 100 watt light bulb for ten hours.

The electricity supply for the City of Great Falls is produced by the Montana Power Company at hydro-electric sites on the Missouri River near the city.

We are concerned with four major consumption areas which are classified as Residential, Commercial, Industrial, and Other. These areas embrace the following bodies of electrical power users----

RESIDENTIAL applies to family dwellings.

COMMERCIAL applies to business establishments that are not engaged in manufacturing, but deal in products and services.

INDUSTRIAL applies to businesses that are engaged in some type of manufacturing or processing that results in a finished product.

OTHER applies to Government and Municipal agencies which includes military installations and service facilities of the city such as police and fire station and street lighting districts.

The total consumption of electricity from 1940 through 1964 has been increasing at a rapid rate. Total consumption in 1964 was 576% higher than in 1940. By areas, residential and commercial consumption experienced approximately the same rate of increase, i. e., 683% and 626%, respectively. During this twenty-five year period, industrial consumption increased but at a much lower rate since it had only a 298% increase. Other experienced the largest increase but it started from a small base of kilo-watt hour consumption.

Total customers are also classified according to the designations of Residential, Commercial, Industrial, and Other. All customer areas enjoyed increases with Industrial consumers going up by 142% and Residential and Commercial customers increasing by 120% and 87%, respectively. The Other classification of consumers shows a more than proportionate increase because the base-year of 1940 had only 8 customers.

Chart 21 shows the upward trend from 1940 to 1964 by major consumption areas of electricity consumption and the number of electric meters in use.

The appropriate statistical data are summarized below as well as in Table 12 at the end of the Chapter.

Electricity Consumption (000's of KW-Hrs)

Major Areas	1940	1945	1950	1955	1960	1964
Total	34,704	51,297	74,408	111,033	176,081	234,714
Residential	9,865	11,877	22,259	37,880	58,489	77,244
Commercial	9,882	20,882	29,544	33,399	51,862	71,780
Industrial	9,228	12,300	14,551	19,073	32,872	36,760
Other	5,729	6,238	8,053	20,681	32,858	48,910

Electricity Customers

Major Areas	1940	1945	1950	1955	1960	1964
Total	9,800	10,210	13,013	15,989	19,404	21,341
Residential	8,699	9,054	11,545	14,208	17,442	19,165
Commercial	933	1,016	1,226	1,410	1,668	1,860
Industrial	100	99	180	214	239	242
Other	8	41	62	157	55	74

CHART 21A

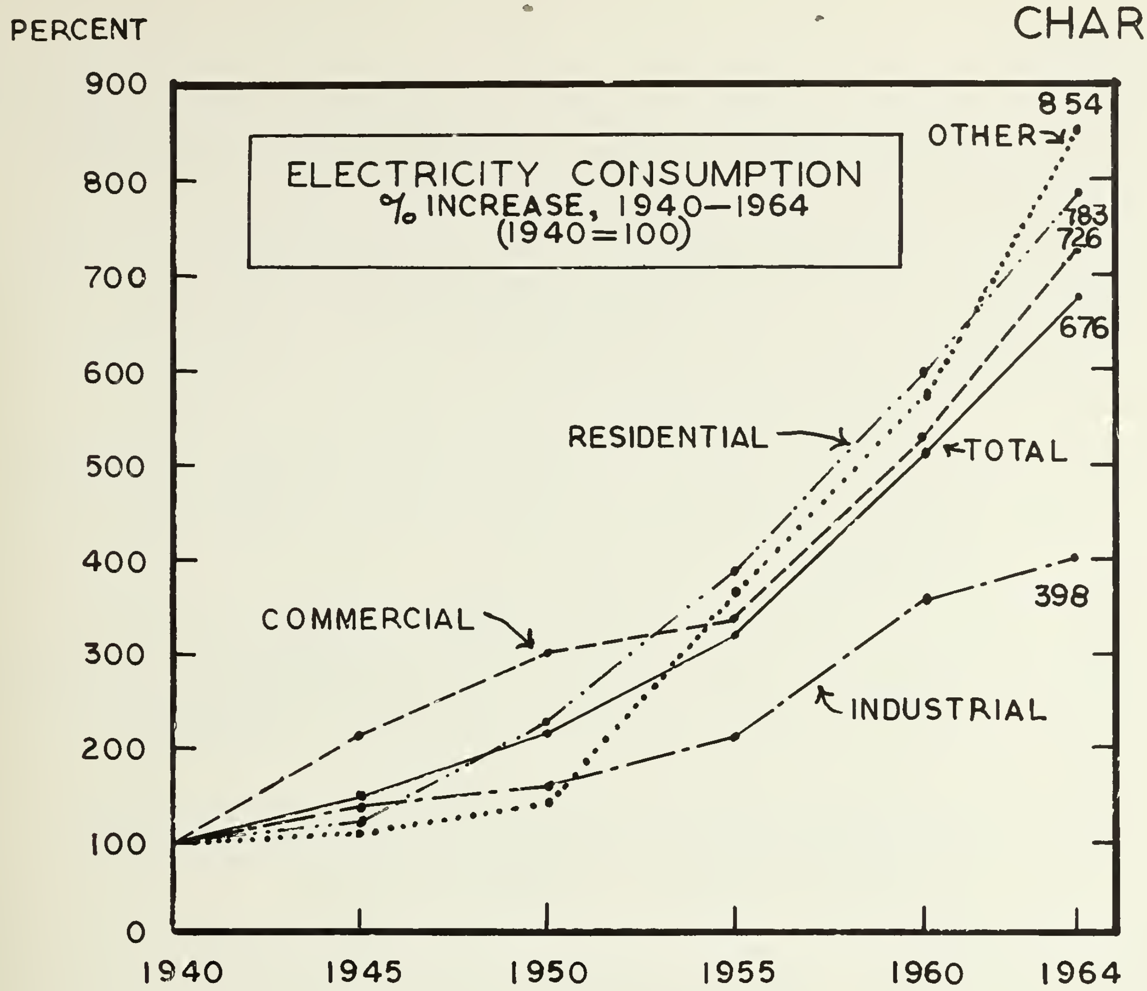
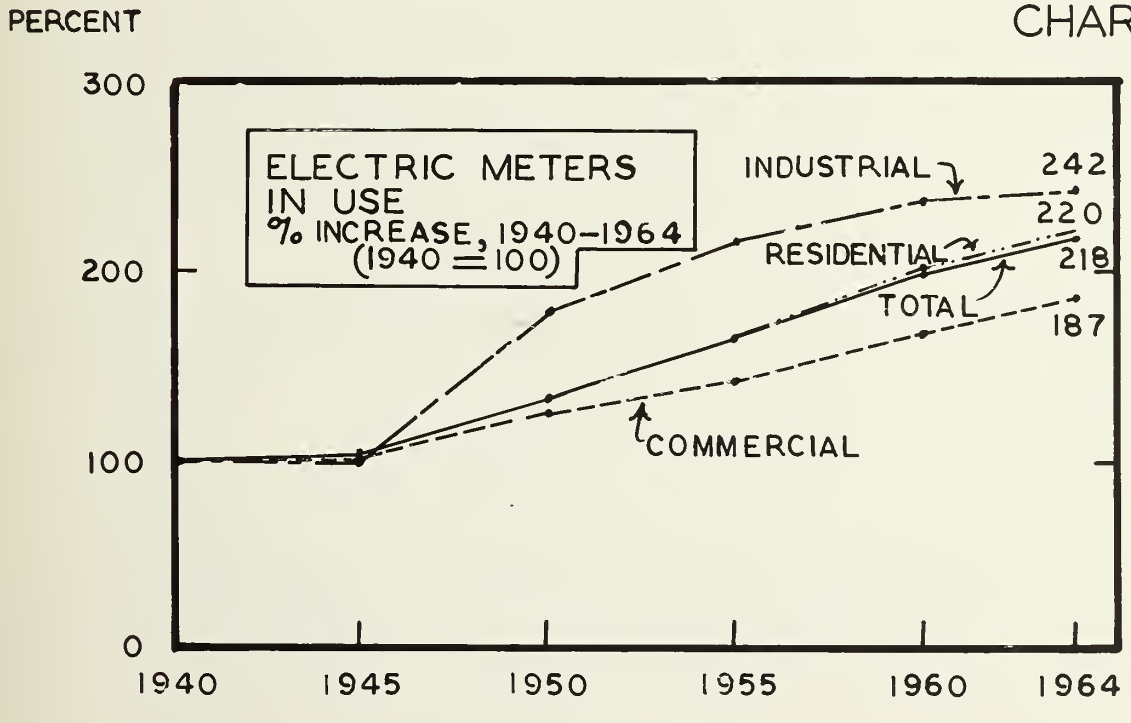


CHART 21B



2. Natural Gas

The data on billions of cubic feet (BCF) of natural gas consumption and the number of meters in use have been furnished through the courtesy of the Great Falls Gas Company.

We are concerned with four major consumption areas which are classified as Residential, Commercial, Industrial and U. S. Government Agencies. These areas embrace the following bodies of natural gas users---

RESIDENTIAL applies to family dwellings.

COMMERCIAL applies to business establishments that are not engaged in manufacturing, but deal in products and services.

INDUSTRIAL applies to businesses that are engaged in some type of manufacturing or processing that results in a finished product.

U. S. GOVERNMENT AGENCIES includes sales to U. S. Housing Authority from 1940 through 1957, and Malmstrom Air Force Base from 1951. During the year 1958, the federal government sold its housing units to private businesses and since then these sales have been classified under Commercial Sales.

In 1951, Malmstrom AFB converted from fuel oil to natural gas and became a customer of the Great Falls Gas Company. At the present time, sales to U. S. Government Agencies includes only sales to Malmstrom AFB.

The total consumption of natural gas from 1940 through 1964 has been increasing at a rapid rate. Total consumption in 1964 was 428% higher than in 1940.

Although all four consumption areas have experienced remarkable increases, however, shifts in customer classification as well as the addition of Malmstrom AFB has resulted in a different consumption area pattern as of 1964. The impact of these shifts can be observed in the actual data in Table 12 at the end of the chapter as well as the following summary.

Natural Gas Consumption Areas, 1940 and 1964

Areas	1940	1964
Residential	66.9%	46%
Commercial	29.3%	31%
Sub-total	96.2%	77%
Industrial	3.8%	8%
U. S. Government Agencies		15%
	100.0%	100%

The Great Falls Gas Company increased the number of meters in use from 6,330

CHART 22A

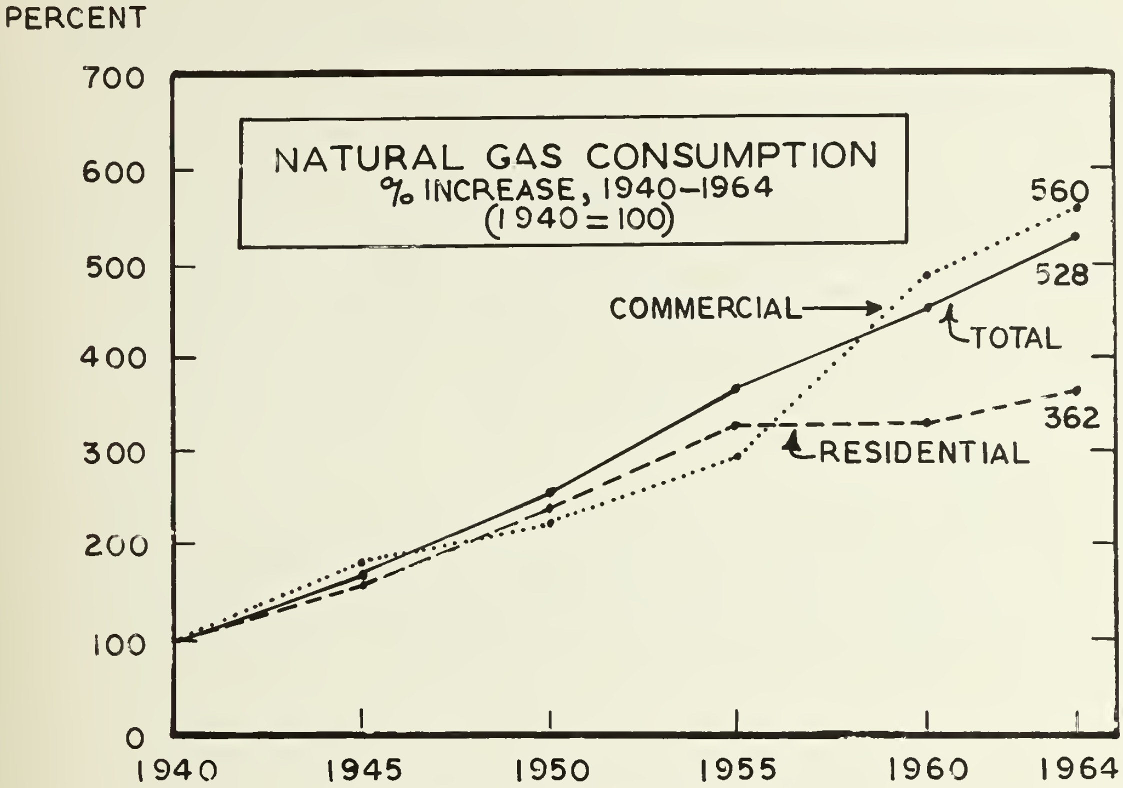
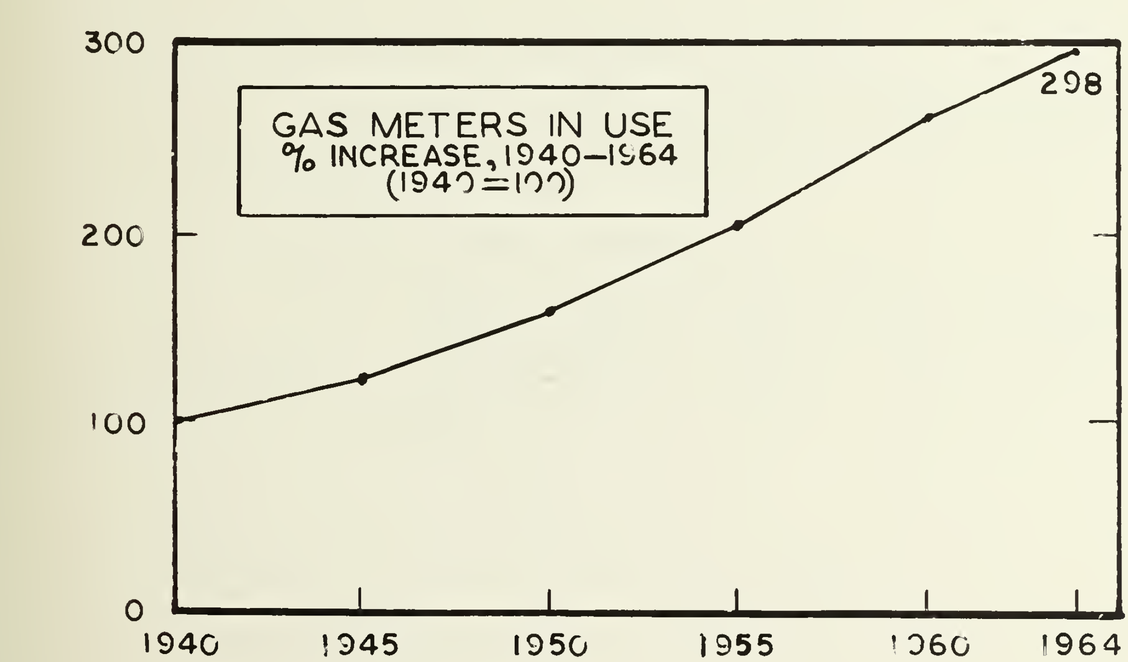


CHART 22B



in 1940 to 18,869 in 1964. The accompanying chart shows that the number of meters in use during this period increased at a steady pace.

The appropriate statistical data are summarized below as well as in Table 12 at the end of the Chapter.

Natural Gas Consumption (BCF)						
Major Areas	1940	1945	1950	1955	1960	1964
Total	1,213	2,076	3,073	4,394	5,496	6,402
Residentail	811	1,299	1,928	2,609	2,626	2,938
Commercial	356	631	855	1,034	1,731	1,993
Industrial	44	106	231	269	568	532
U.S. Gov. Agency	2	39	59	481	571	940

	Natural Gas Meters-in-Use					
	1940	1945	1950	1955	1960	1964
Total	6,330	7,662	9,992	13,006	16,439	18,869

3. Water

The data on millions of gallons of water consumption (total amount of water pumped and collected during a year) and the number of consumers (services and meters in use) have been furnished through the courtesy of the Water Department of the City of Great Falls. Yearly data are recorded on page 10 of the Annual Report of the City of Great Falls on Water Utility to the Public Service Commission.

As required by the Annual Report, the Water Department classifies their consumers into two categories, private and public consumers. Private Consumers include residences, stores, office buildings, apartment houses, hotels, boarding houses, churches, factories, warehouses, garden tracts, and miscellaneous. Public Consumers include schools, government agencies, hospitals, public fountains and troughs, and fire hydrants.

The total consumption of water in the City of Great Falls has increased steadily since 1940. As of 1964, water consumption was 78% higher than in 1940. Total consumers (private and public) has shown the same steady upward movement of a growing community.

The appropriate statistical data are summarized below as well as in Table 12 at the end of the chapter.

Water Consumption (millions of gallons)

	1940	1945	1950	1955	1960	1964
Total	2,380	2,515	3,106	3,207	3,919	4,258

	Water Customers					
	1940	1945	1950	1955	1960	1964
Total	6,481	7,471	9,760	11,679	14,753	16,971
Private Consumers	5,782	6,711	8,807	10,593	13,252	15,122
Public Consumers	699	760	953	1,076	1,501	1,849

CHART 23A

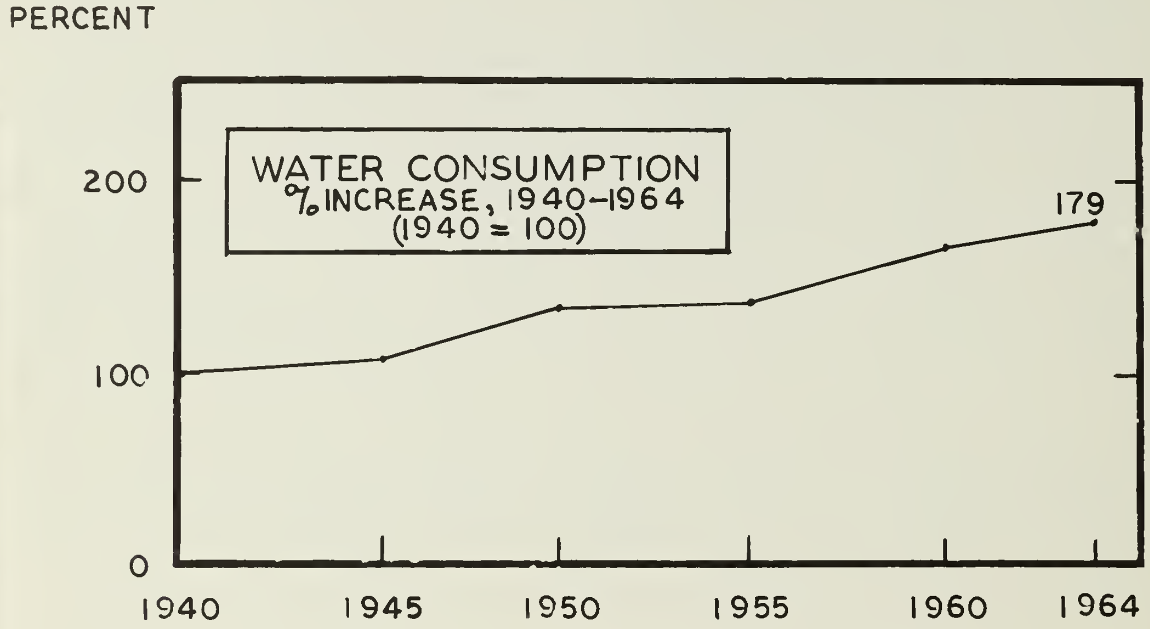
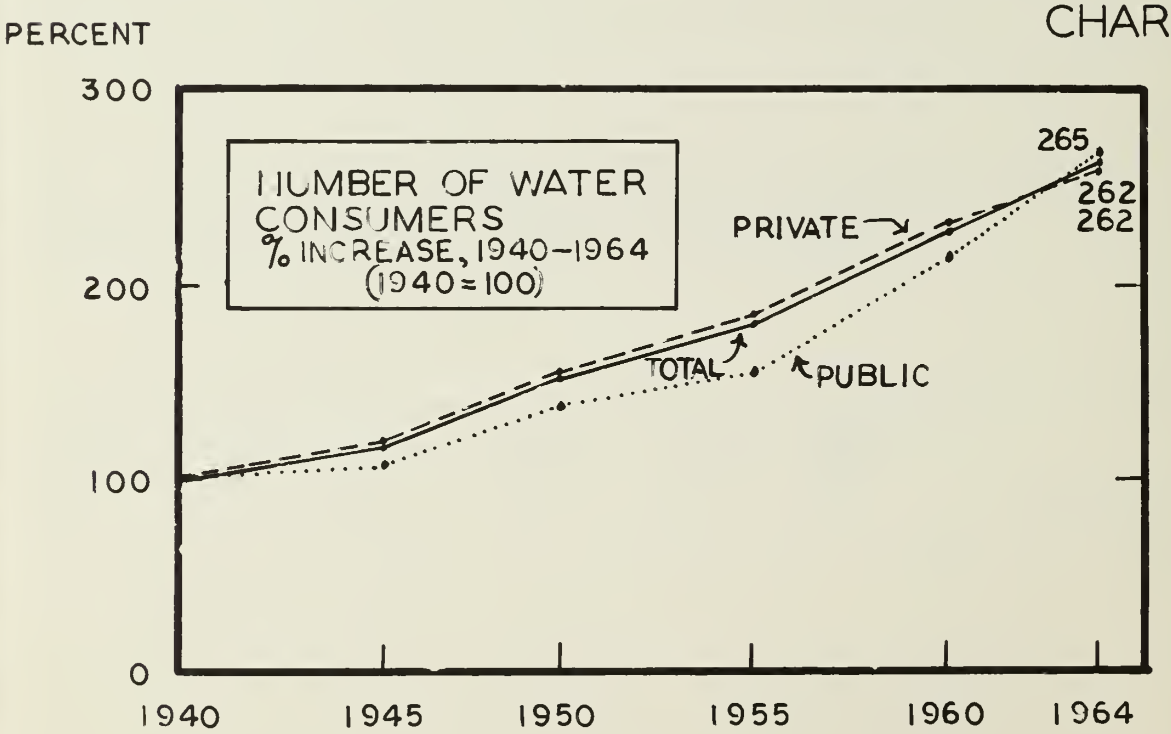


CHART 23B



4. Telephone Ownership and Calls

The data on telephone ownership, the average daily number of long distance calls placed by operators or handled by equipment in Great Falls, and the average daily number of local calls originating in Great Falls have been furnished through the courtesy of the Mountain States Telephone and Telegraph Company.

a. Telephone Ownership

Mountain States Telephone and Telegraph Company classifies their customers into two categories: residents and business firms. Each telephone which is installed with a different telephone number is designated as a main station. Thus, a business or residence with several telephone instruments or extensions but only one telephone number would be counted as one main station.

The number of residents and business main station telephones increased at a rapid rate between 1940 and 1964 with residents increasing slightly faster than business firms. During this period while the total ownership of telephones increased by 350%, residents experienced a 404% increase while business telephones increased 253%. The significance of these varying rates of increases is shown in the following summary.

Distribution of Telephone Ownership

Year	Residents	Business
1940	64%	36%
1945	65	35
1950	68	32
1955	69	31
1960	70	30
1964	72	28

b. Average Daily Long Distance Calls

The number of long distance calls placed by operators or handled by equipment in Great Falls have increased tremendously over the last twenty-five years. In 1940, operators placed or originated an average of 515 calls per day. A high percentage, but not all, of these calls were completed. In 1964, operators and equipment which handled direct long distance dialing placed a daily average of 10,610 calls.

The growth in the number of long distance telephone calls since 1960 is extremely impressive. An important reason for this increase has been the introduction of automatic equipment that permits direct dialing by the customer at a lower cost or telephone charge. The following summary shows the growth in long distance telephone calls originating in Great Falls since 1960.

Average Daily Long Distance Telephone Calls, 1960-1964

Year	Calls: Placed by Regular Operator	Placed by Special Operator	Direct Distance Dialing	Total Calls	1960= 100
1960	4,177	——	——	4,177	100%
1961	3,537	——	——	3,537	85%
1962	4,949	2,034	——	6,983	167%
1963	4,273	2,307	2,845	9,425	226%
1964	4,585	2,517	3,508	10,610	254%

In 1960 and 1961, all long distance calls originating in Great Falls were placed by the regular operators. Beginning in 1962 with the introduction of automated equipment a special operator received the calling number and the number was key punched into a recording machine that records the length and charges for the call. In 1964, direct distance dialing was introduced and the call is handled completely by machine.

c. Average Daily Local Originating Calls

Data on the average daily number of local calls originating in Great Falls are also available for the years since 1953. In that year local resident and business customers placed an average of 102,588 daily calls. This daily average increased by 87% as of 1964 with 192,548 calls being made. Even since 1960, the daily average has increased by 25%.

Average Daily Local Originating Calls, 1953-1964

Year	Average Daily Local Calls (000's)	1953= 100	1960= 100
1953	103	100%	——
1955	120	117%	——
1960	154	150%	100%
1964	193	187%	125%

CHART 24A

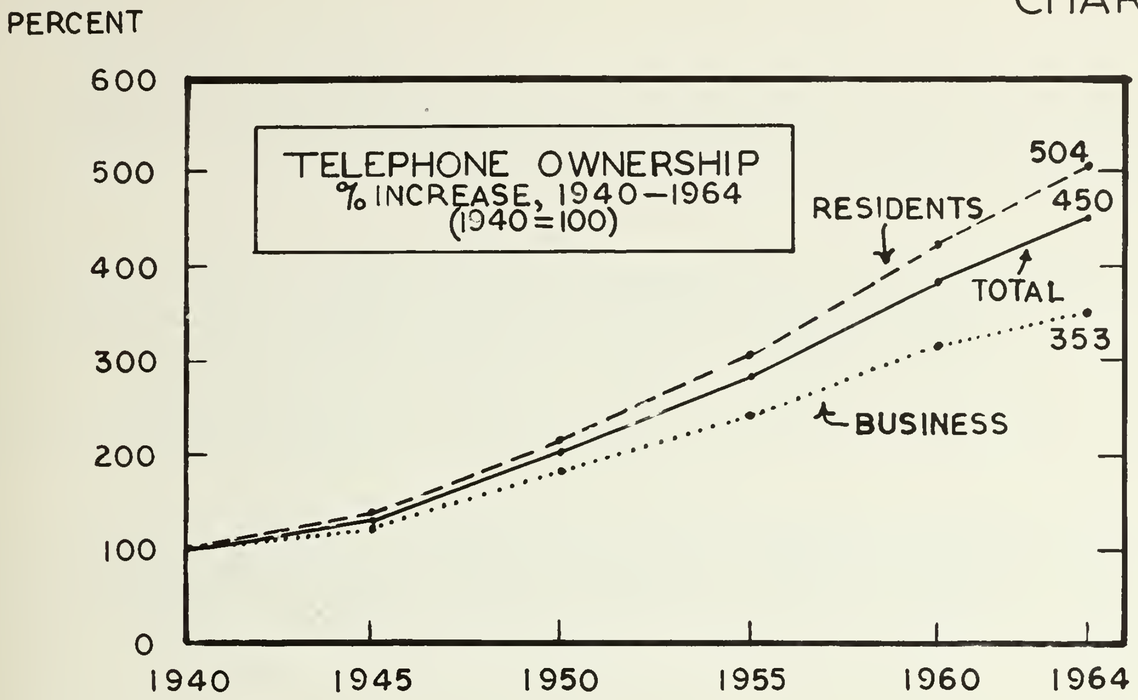
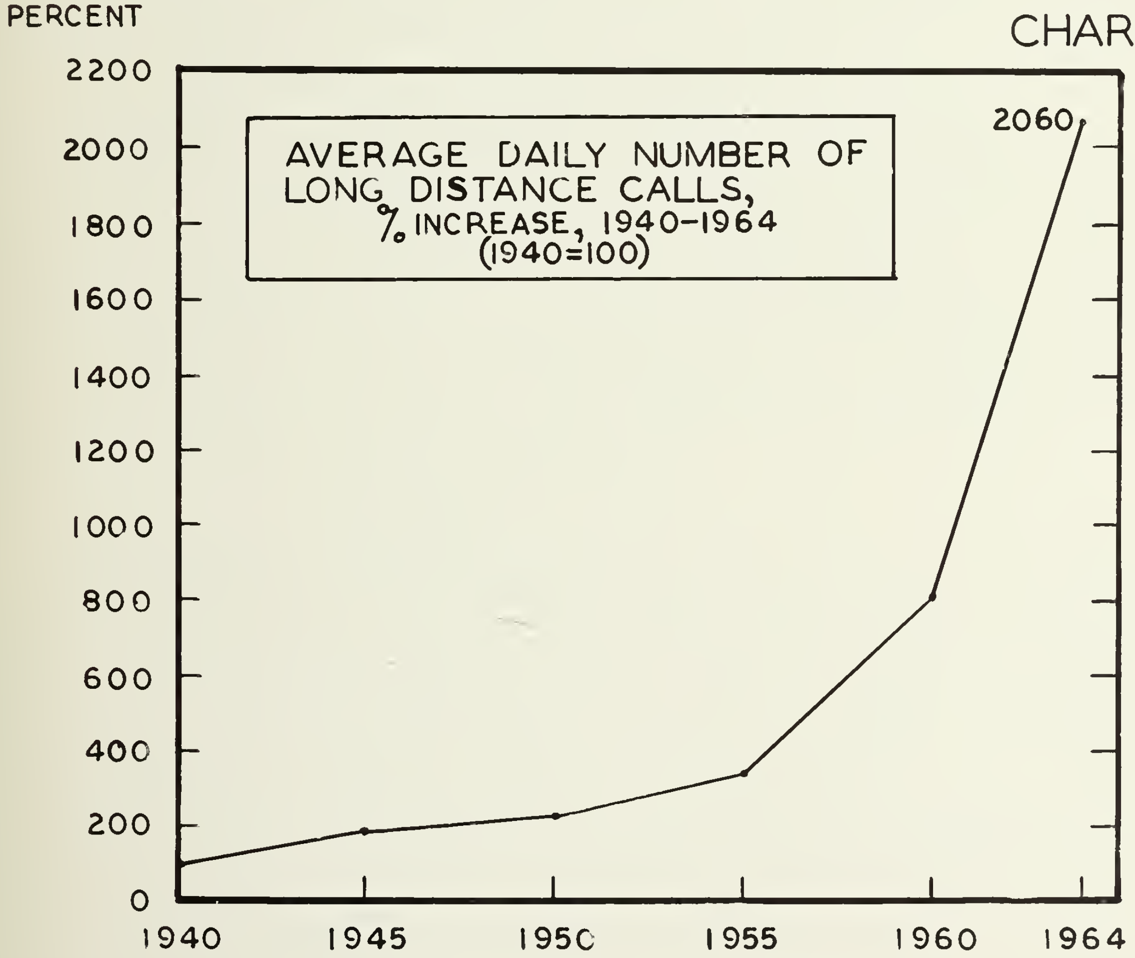


CHART 24B



The appropriate statistical data are summarized below as well as in Table 12 at the end of the chapter.

Telephone Ownership

	1940	1945	1950	1955	1960	1964
Total	8,120	10,526	16,587	22,971	31,175	36,500
Residents	5,170	6,851	11,231	15,809	21,834	26,080
Business	2,950	3,675	5,356	7,162	9,341	10,420

Long Distance Telephone Calls (Daily Average)

	1940	1945	1950	1955	1960	1964
Total	515	968	1,148	1,727	4,177	10,610

5. Bank Debits

The economic indicators presented thus far in this chapter reflect changes in physical volume. The three financial indicators to be reviewed are measured in dollars and thus reflect changes in prices as well as changes in physical volume.

Bank debits represents one of the most comprehensive economic or business indicators since it shows the extent to which bank depositors are using or writing checks against their checking accounts. Bank debit data includes all checks written against all checking account or demand deposit accounts on the books of commercial banks.

Through the courtesy of the Federal Reserve Bank of Minneapolis, bank debit data for the City of Great Falls and the State of Montana were made available. The state data includes the average daily debits of banks in 16 Montana cities: Anaconda, Billings, Bozeman, Butte, Deer Lodge, Glasgow, Glendive, Great Falls, Harlowton, Havre, Helena, Kalispell, Lewistown, Malta, Miles City, and Missoula. Beginning in the 1950's bank debit data have been made available for other cities in Montana but were not available in the base year (1940) of our index. Consequently, they were left out of our state tabulation.

During the twenty-five year period from 1940 through 1964, bank debits for the City of Great Falls expanded more rapidly than the index of bank debits for the State of Montana. Great Falls enjoyed a 644% increase while the state experienced only a 531% increase. This measure of the greater increase in the volume of business activity in Great Falls over the state is borne out by the fact that in 1940 the City of Great Falls represented 16.4% of the state bank debits while in 1964 it represented 19.3%.

6. Total Deposits of Commercial Banks

Another dollar measure of economic or business activity in the Great Falls area are the total deposits of commercial banks. Total deposits include all demand deposits (checking accounts) and time deposits (savings accounts). Inasmuch as total deposits are measured in dollars, it is subject to price change as well as changes in physical volume of business activity.

Total deposits of commercial banks increased from $16,662,000 in 1940 to $131,208,000 in 1964. This change represented an increase of 687% over the twenty-five year period.

Total deposit data have been made available through the courtesy of the commercial banks of Great Falls.

CHART 25A

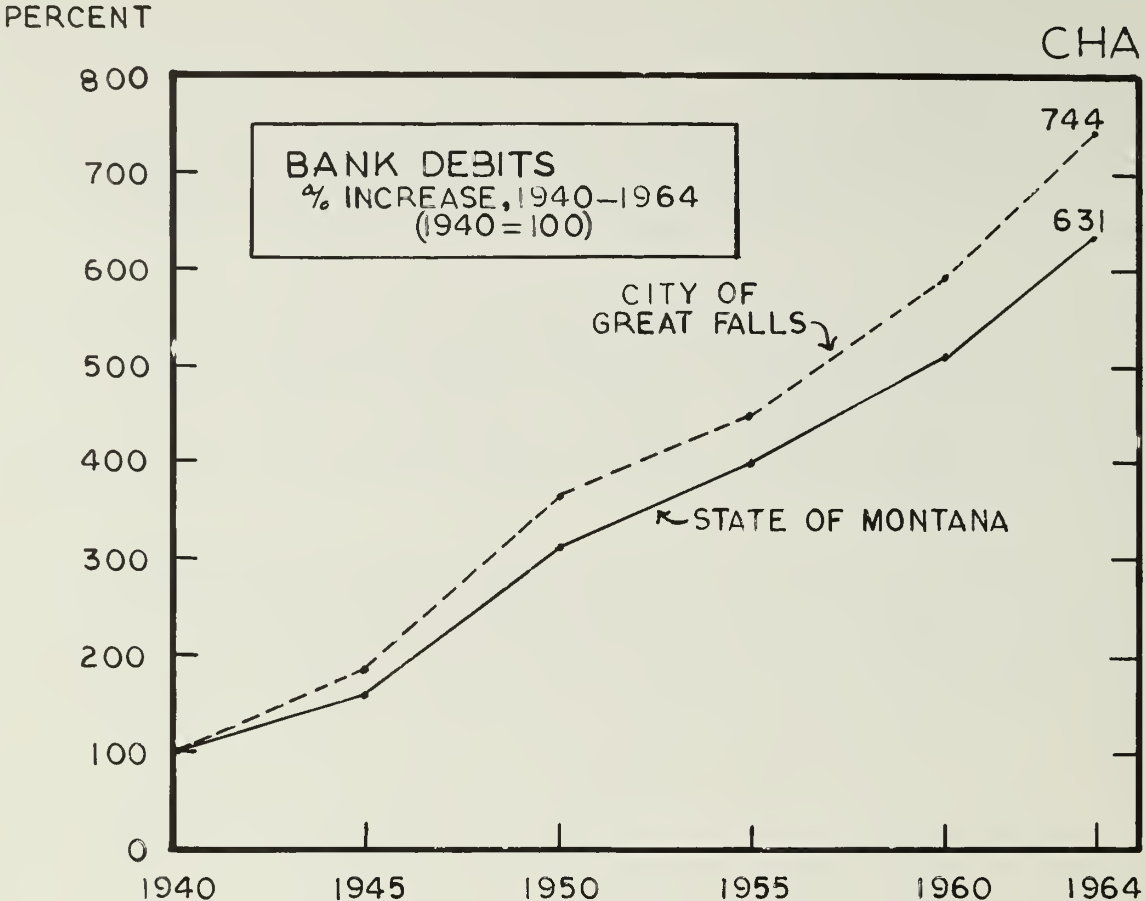
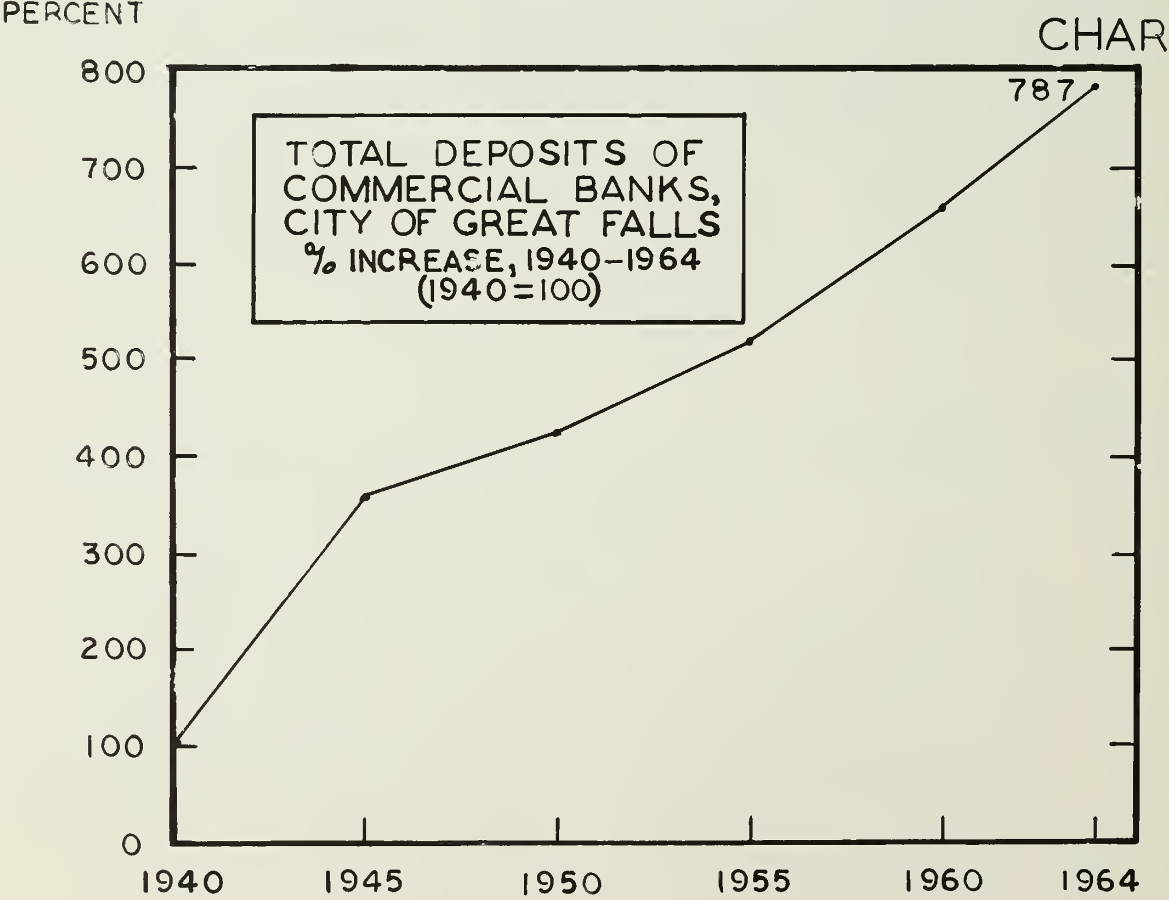


CHART 25B



7. Loans and Discounts of Commercial Banks

Loans and discounts are also measured in dollars and thus reflect price changes as well as changes in physical volume of business activity in the Great Falls area. Loans and deposits are net in that they have been reduced by the amount allocated as reserve for bad debts.

Over the period from 1940 through 1964, loans and discounts of commercial banks in Great Falls increased by 1,672%, or almost 17 times. The dollar volume increased from $4,472,000 in 1940 to $79,248,000 in 1964.

Inasmuch as the index of loans and discounts increased at a faster rate than the index of total deposits, local commercial banks experienced a more intensive and profitable utilization of their deposit liabilities. This is borne out by the following summary table.

Allocation of Total Assets

Year	% of Loans to Total Assets	% of Investments to Total Assets
1940	24%	32%
1950	23%	53%
1955	37%	45%
1960	44%	35%
1964	54%	27%

The data on loans and discounts have been made available through the courtesy of the commercial banks of Great Falls.

The appropriate statestical data are summarized below as well as in Table 12 at the end of the chapter.

Bank Debits (000's of $)

	1940	1945	1950	1955	1960	1964
State of Montana	$989	$1,568	$3,078	$3,933	$5,025	$6,245
City of Great Falls	$162	$ 305	$ 590	$ 719	$ 958	$1,205

Deposits of Commercial Banks (000's of $)

	1940	1945	1950	1955	1960	1964
Total	$16,662	$59,514	$70,312	$86,733	$109,685	$131,208

Laons and Discounts of Commercial Banks (000's of $)

	1940	1945	1950	1955	1960	1964
Total	$4,472	$5,221	$16,687	$34,128	$52,473	$79,248

C. Air Traffic Activity of Great Falls International Airport

The data on the various aspects of air traffic activity at the Great Falls International Airport have been furnished through the courtesy of the Federal Aviation Agency, Washington, D. C.

The FAA-operated airport traffic control tower at the GF International Airport was commissioned in 1942. However, the air traffic activity records in the Washington Headquarters only go back to 1948.

The statistical analysis of air traffic activity in this part of the report uses 1950 as the base-year. The year 1948 was not used because the flight data for 1948 includes the effects of the last year of flight training sponsored by the Veterans Administration. An abnormally large number of local operation flights of a general aviation nature took place during that year. Specifically, Table 13 shows 111,525 General Aviation local operations for 1948. In order to present a truer picture of air traffic activity, the year 1950 was selected as the base-year to measure growth changes.

	1950=100	1964
Total Aircraft Operation	100	148
Total Itinerant Operation	100	175
Air Carrier	100	159
General Aviation	100	370
Military	100	49
Total Local Operation	100	122
General Aviation	100	116
Military	100	164
Enplaned Passengers	100	308

The appropriate statistical data relative to air traffic activity at the GF International Airport are summarized below as well as in Table 13 at the end of the chapter.

Landings and Take-Offs, Great Falls Airport

Type of Air Activity	1948	1950	1955	1960	1964
Total Aircraft Operations	136,563	67,662	88,440	92,435	99,675
Total Itinerant Operations	18,702	32,474	58,941	57,999	56,778
Air Carrier	4,398	6,592	12,107	10,963	10,481
General Aviation	8,294	10,332	15,120	34,249	38,694
Military	6,010	15,550	31,714	12,787	7,603
Total Local Operations	117,861	35,188	29,499	34,436	42,897
General Aviation	111,525	30,725	23,138	27,542	35,557
Military	6,336	4,463	6,361	6,894	7,340

Enplaned Passengers, Great Falls Airport

	1948	1950	1955	1960	1964
Total	14,253	20,902	21,764	41,736	64,331

Total Aircraft Operations is a count of the number of aircraft that arrive at or depart from, an airport with an FAA airport traffic control service. It may more popularly be referred to as the number of Landings and Take-offs of all types of aircraft. There are two main types of Aircraft Operations (Landings and Take-offs) ---Itinerant and Local.

Additional explanations of importance are ---

Air Carrier Operations---All civil scheduled, local service, and irregular airline carrier operations.

General Aviation Operations---All civilian aircraft operations, except those classified as air carriers.

Military Operations---An operation by military aircraft.

One major area of Aircraft Operation (Landings and Take-offs) which requires an explanation is the Military landings and take-offs under Total Itinerant Operations. The flight data vary considerably between 1950 and 1964. The FFA recorded an increase of 16,164 flights (15,550 to 31,714) between 1950 and 1955 and then a substantial decrease to 1964. The increase during the early years of this period was caused by the number and type of aircraft utilized at Malmstrom AFB. Malmstrom used the runways at International Airport for training missions and also when maintenance work was being done to the Malmstrom landing field. After 1955, the number of aircraft assigned to Malmstrom was reduced and the Military landings and take-offs at International Airport were likewise reduced.

It is interesting to note that between 1950 and 1964, GF International Airport enjoyed a 48% increase in Total Aircraft Operations (Landings and Take-offs). Also, Itinerant General Aviation (all civilian aircraft except those classified as air carriers) experienced the largest absolute and percentage increase. Between 1950 and 1964, General Aviation landings and take-offs increased from 10,332 to 38,694, or an increase of 270%. During this same period, Air Carrier (scheduled and irregular civil airline flights) also increased from 6,592 landing and take-offs to 10,481, or an increase of 59%.

Between 1950 and 1964, while the Itinerant Military Operations decreased due to the shift in the type of Malmstrom aircraft activity the Local Military Operations increased by 64% from 4,463 landings and take-offs to 7,340 primarily as a result of increased activity on the part of the locally-based Air National Guard.

Enplaned Passenger data are also available from the Washington Headquarters of the Federal Aviation Agency. Enplaned passengers are the number of revenue passengers boarding scheduled flights of air carriers certificated by the Civil Aeronautics Board, and includes originating, stopover and transfer passengers. The following summary shows passenger data from 1948 to 1964.

Enplaned Passengers at GF International Airport, 1948-1964

Year	Passengers	1950=100	1948=100
1948	14,253	---	100
1950	20,902	100	147
1955	21.764	104	153
1960	41,736	200	293
1964	64,331	308	451

Table 12
Selected Economic Indicators of Great Falls Growth, 1940-1964
(Electricity, Natural Gas, Water, Telephone, and Financial)

INDICATOR	UNIT OF MEASURE	ACTUAL DATA						100%	Percent INCREASE FROM 1940				
		1940	1945	1950	1955	1960	1964	1940	1945	1950	1955	1960	1964
Electricity	000's of KW-Hrs												
Total Consumption	"	34,704	51,297	74,408	111,033	176,081	234,714	100	148	214	320	507	676
Residential	"	9,865	11,877	22,259	37,880	58,489	77,244	100	120	226	384	593	783
Commercial	"	9,882	20,882	29,544	33,399	51,862	71,780	100	211	299	338	525	726
Industrial	"	9,228	12,300	14,551	19,073	32,872	36,760	100	133	158	207	356	398
Other	"	5,729	6,238	8,053	20,681	32,858	48,910	100	109	141	361	569	854
Total Customers	number	9,800	10,210	13,013	15,989	19,404	21,341	100	104	133	163	198	218
Residential	"	8,699	9,054	11,545	14,208	17,442	19,165	100	104	133	163	201	220
Commercial	"	993	1,016	1,226	1,410	1,668	1,860	100	102	124	142	168	187
Industrial	"	100	99	180	214	239	242	100	99	180	214	239	242
Other	"	8	41	62	157	55	74	100	-	-	-	-	-
Natural Gas													
Total Consumption	BCF	1,213	2,076	3,073	4,394	5,496	6,402	100	171	253	362	453	528
Residential	"	811	1,299	1,928	2,609	2,626	2,938	100	160	238	322	324	362
Commercial	"	356	631	855	1,034	1,731	1,993	100	177	240	290	486	560
Industrial	"	44	106	231	269	568	532	100	-	-	-	-	-
U.S. Government Agencies	"	2	39	59	481	571	940	-	-	-	-	-	-
Meters in Use	number	6,330	7,662	9,992	13,006	16,439	18,869	100	121	158	206	260	298
Water	MILLIONS OF GALLONS												
Total Consumption		2,380	2,515	3,106	3,207	3,919	4,258	100	106	131	135	165	179
Total Consumers	number	6,481	7,471	9,760	11,679	14,753	16,971	100	115	151	180	228	262
Private Consumers	"	5,782	6,711	8,807	10,593	13,252	15,122	100	116	152	183	229	262
Public Consumers	"	699	760	953	1,076	1,501	1,849	100	109	136	154	215	265
Telephone Ownership	NUMBER												
TOTAL	"	8,120	10,526	16,587	22,971	31,175	36,500	100	130	204	283	384	450
Residents	"	5,170	6,851	11,231	15,809	21,834	26,080	100	133	217	306	422	504
Business	"	2,950	3,675	5,356	7,162	9,341	10,420	100	125	182	243	317	353
Telephone Toll Calls	Average Daily												
Total Long Distance Calls	Number	515	968	1,148	1,727	4,177	10,610	100	188	223	335	811	2060
Bank Debits	000's of $												
State of Montana	"	$989	$1,568	$3,078	$ 3,933	$ 5,025	$ 6,245	100	159	311	397	508	631
City of Great Falls	"	$162	$ 305	$ 590	$ 719	$ 958	$ 1,205	100	188	364	444	591	744
Total Deposits of Commercial Banks	000's of $	$16,662	$59,514	$70,312	$86,733	$109,685	$131,208	100	357	422	520	658	787
Loans and Discounts of Commercial Banks	000's of $	$4,472	$5,221	$16,687	$34,128	$52,473	$79,248	100	117	373	763	1,173	1,772

Table 13

Air Traffic Activity of Great Falls International Airport
as Economic Growth Indicator, 1950-1964

AIR TRAFFIC ACTIVITY, GREAT FALLS	Number	ACTUAL DATA (Calendar Year)					1950=	PERCENT INCREASE FROM 1950		
		1948	1950	1955	1960	1964	100%	1955	1960	1964
Total Aircraft Operations	"	136,563	67,662	88,440	92,435	99,675	100	131	137	148
Total Itinerant Operations	"	18,702	32,474	58,941	57,999	56,778	100	182	179	175
Air Carrier	"	4,398	6,592	12,107	10,963	10,481	100	184	166	159
General Aviation	"	8,294	10,332	15,120	34,249	38,694	100	146	331	370
Military	"	6,010	15,550	31,714	12,787	7,603	100	204	82	49
Total Local Operations	"	117,861	35,188	29,499	34,436	42,897	100	84	98	122
General Aviation	"	111,525	30,725	23,138	27,542	35,557	100	75	90	116
Military	"	6,336	4,463	6,361	6,894	7,340	100	143	154	164
Enplaned Passengers	"	14,253	20,902	21,764	41,736	64,331 [a]	100	104	200	308

[a] Fiscal Year

Appendix 1

GREAT FALLS, MONTANA
Population Estimates for July 1, 1964
Prepared by the Great Falls Chamber of Commerce

CITY OF GREAT FALLS

1960 Population - Official Census		55,357
Residential permits - new houses built since the 1960 census	2,539	
Number per household (census)	x 3.1	
Population increase since 1960	7,870	
Deduct: Estimated vacancies 200 households x 3.1	(620)	
Net Population Increase Estimate		7,250
City Zone Population Estimate for 1964		62,607

METROPOLITAN AREA *

(City limits plus Black Eagle,
adjacent areas and Malmstrom AFB)

*1960 Census: 57,629 but not including Malmstrom AFB

1964 Estimated City Zone Population - July 1	62,607
In 1960 Census, 4.1% lived outside the city in adjacent area....using same factor applied to current estimates: 4.1% x 62,607 = increase	2,568
Add: Estimate military and dependent populations living on Malmstrom AFB proper	7,015
Estimated Total Metropolitan Area Population	72,190

Appendix 2

Survey Analysis Sheet

CONFIDENTIAL
Questionnaire #______
Area #______

College of Great Falls
Department of Business Administration and Economics

TENTH AVENUE SOUTH ECONOMIC IMPACT RESEARCH PROJECT

1. Name of Business ______________________________

2. Address ______________ Block Number ________ Lot Number ______

3. Type of Business ______________ City (___) County (___)

   1. Total land ______________(Square Feet)
   2. Total Floor Space ______________
   3. Parking Area ______________
   4. Outdoor Storage Area ______________
   5. Area in Other Use ______________ Please state ______________
   6. Area Vacant (Not in Use) ______________

   Valuation
   1. Normal Value (Market) $ ______________
   2. Assessed Value of Buildings $ ______________
   3. Assessed Land Value $ ______________
   4. Front Foot Price $ ______________

   Front Footage of Tenth Avenue South Property Total ________(feet)
   (a) Commercial (with buildings) ________ (a) Residential (single) ______
   (b) Commercial (no buildings) ________ (b) Residential (duplex) ______
   (c) Commercial (with house) ________ (c) Residential (apartments) ___
   (d) Commercial (vacant) ________ (d) Residential (vacant) ______

4. Type of Ownership: Proprietorship(__), Partnership (_), Corporation (__)
   If partnerhsip, number ______________

5. Year of location at this address ______________

6. Have you expanded your facilities since locating here? Yes__No___Year?______

7. Do you consider this location advantageous over others in Great Falls?
   Yes____No____ If yes, why? ______________
   _____ (a) More accessible than other city loactions ___(e) Space for expansion
   _____ (b) More parking ( ) Customers ( ) Employees ___(f) Lower rent
   _____ (c) Free parking ___(g) Shifting population center
   _____ (d) More traffic - (Customer potential) ____(h) Other (Explain)

8. Have you re-located to your present location? Yes__No__If yes, where from?
   ______________(City Address) ______________(Other city)
   ______________(Other State)

9. Is this location your only place of business in Great Falls? Yes____No ____
   If no, where else? ______________

10. Do you mention the advantage of your location in your advertising? Yes__No__
    If yes, do you think this helps? ______________

11. Number of Employees______ FT ____(present)__________ Male __________Female
    PT ____
    Number of Employees in 1960 _______,in 1950 ________, in 1940 ________

12. Number and Type of Employees:___Administration (Management) ____Operating
    ______Sales

(over)

13. Do you have pick-up and delivery service? Yes____ No____
If yes, is it free? ________ Charge?________ How much?____________

14 Telephone numbers ____________ Extensions ________________

RESTAURANT SECTION

1. Seating capacity________ 2. Hours of Service: ______A.M. to ______ P.M.

3. Number of daily customers: ________A.M. ________noon ________P.M.

4. Beer License ________________ 5. Liquor License ________________

MOTEL SECTION

1. Number of Rooms ______ 2. Dining Facilities___Yes___No(If yes, fill in Restaurant Section

3. Independent________ Affiliated ________________________
(name)

SERVICE STATION SECTION

1. Hours in operation ______From____A.M. to ___P.M. 2. Number of Pumps____

3. Number of stalls ________ 4. Other facilities ________________

5. Mechanic Available ____Yes _____No If yes, number____________

PROFESSIONAL SERVICE SECTION

1. Type of Service ________________________

NEW AND USED CAR SECTION

1. Number of cars on lot___(New___) (Used___), In building_____ (New__)(Used__),

MOBILE HOME SECTION (TRAILERS)

1. Number of trailers on lot ________________. (New_____) (Used________)

MOBILE HOME SECTION (TRAILER COURTS)

1. Number of trailer locations __________ (Occupied ____) (Vacant_____)

MULTIPLE DWELLING SECTION (APARTMENTS)

1. Total number of Apartments
________(One Bedroom) (___Occupied, ___Vacant)
________(Two Bedroom) (___Occupied, ___Vacant)
________(Three Bedroom) (___Occupied, ___Vacant)

LAUNDRY AND DRY CLEANING SECTION (Self Service)

____Number of Washers ______Number of Dryers ________Number of Dry Cleaning Units

PERSONAL SERVICES SECTION

________Barber Shops (______Number of Chairs)
________Beauty Shops (______Number of Chairs)

REMARKS: ____
____

INFORMATION OBTAINED FROM ____________________, ____________________
(name) (title)

Number of Survey Analysis Forms

One of the methods used to develop organized information for this study was to establish a Survey Analysis Sheet for each piece of property in the Complex area as shown on the public records in the Assessor's and Reclassification offices in the Cascade County Courthouse. Also, when a piece of property, such as Holiday Village Shopping Center, had more than one type of business in operation, a separate Survey Analysis Sheet was prepared for each type of business. Thus, a master sheet was prepared for each "Multi-Business Operation" where two or more businesses were operating in close proximity and created a "group" appearance, and for each separate business in the "Multi-Business" unit. There are 13 such "Multi-Businesses" within the Tenth Avenue Business Complex.

As part of the Survey Analysis Sheet, data were accumulated which showed by type of land use activities, as per Appendix 4, and by the twelve (12) areas, information relative to total land, floor space, parking area, outside storage area, area in other use, and vacant land.

The following tabulation shows the number of survey forms used in the report's analysis of land and building utilization.

Number of Survey Analysis Sheets Used by Types of Land Use Activities

Land Use Activities		Number	% of Total
I.	Residential	176	26.0
II.	Manufacturing Industries	3	.4
III.	Non-Manufacturing Industries	7	1.0
IV.	Commercial	124	19.0
V.	Wholesale and Storage	13	2.0
VI.	Services	99	15.0
VII.	Public & Quasi-Pub. Bldgs.	10	1.0
VIII.	Public & Quasi-Pub. Open Space	5	.6
IX.	Other Open Space	232	35.0
	Sub-total	669	100.0%
	Multi-Business Operations	13	
	Grand Total	682	

However, the number of "businesses" existing in the Complex as of 1964 were much fewer than the number of pieces of property. Therefore, information relative to points 4 through 14 and the Sections, of the Survey Analysis Sheet were obtained from 272 establishments.

Appendix 3

PUBLIC RELATIONS LETTER TO TENTH AVENUE BUSINESS ESTABLISHMENTS

College of
Great
Falls

1301 Twentieth Street South
Great Falls, Montana

Dear Sir:

The College of Great Falls has been awarded a research grant by the Montana State Highway Commission. The main purpose of this grant is to conduct an economic impact study of Tenth Avenue South to provide information relating to the commercial growth and economic influence of the throughfare. In brief, the study will deal with relationships between highway improvements, traffic growth and business development.

In order to conduct a project of this nature it is necessary that we receive the cooperation of all businessmen on Tenth Avenue South and in the area adjacent to it. We are writing this letter to introduce ourself, and also to acquaint you with the project. The project is under the direction of two Department of Business Administration and Economics faculty members. John T. Farley is Project Director and Anthony C. Ginalias is Field Investigator.

We also wish to inform you that within the coming weeks representatives of the College will call upon you to obtain answers to a few questions pertaining to the project. Inasmuch as building permit data and assessment valuations are a matter of public record, we will only be concerned with information related to location of your business (year, advantages, relocation and expansion, if any, etc.), employment, physical capacity factors, etc.

The visit will not take a great deal of your time, and we will try to call on you at your convenience. The results of the project will be available, and I am sure, very beneficial to all businessmen on Tenth Avenue South.

We are looking forward to acquainting you with further details of the project.

Sincerely yours,

John T. Farley

John T. Farley
Project Director

JTF/afo

Appendix 4

July 10, 1959

BUREAU OF PUBLIC ROADS

LAND USE ACTIVITES CODE FOR ORIGIN-DESTINATION STUDIES

Code

RESIDENTIAL

- 01 . . . . Single dwelling unit--detached
- 02 . . . . Single dwelling unit--attached
  - 021. . . . Semidetached units, duplex, etc
- 03 . . . . Multiple dwelling units, 3-19
  - 031. . . . 3-4 units
  - 032. . . . 5-19 units
- 04 . . . . Multiple dwelling units, 20 and above
- 07 . . . . Motels; tourist homes; tourist camps
  - 071. . . . Motels
- 08 . . . . Trailer courts or camps

MANUFACTURING

- 18 . . . . Food and kindred products
  - 182. . . . Dairy products
  - 188. . . . Beverage industries

NONMANUFACTURING INDUSTRY: (transportation; communication; utilities, extracting and construction industries)

- 36 . . . . Mining, quarrying, and other extracting industries
  - 361. . . . Sand and gravel pits
- 37 . . . . Construction
  - 372. . . . General building contractors with storage yards for construction and maintenance equipment
  - 374. . . . Special trade contractors and storage yards
  - 375. . . . Buildings (all types) under construction
  - 376. . . . Other not elsewhere classified
- 38 . . . . Communication
  - 383. . . . Radio and TV broadcasting stations
- 39 . . . . Utilities (electric, gas and sanitary services)
  - 392. . . . Booster stations or right-of-way for electric lines
  - 399. . . . Others not elsewhere classified

COMMERCIAL

- 40 . . . . Super food markets
- 41 . . . . Other food establishments
  - 415. . . . Fish and seafoods
  - 416. . . . Dairy products
  - 419. . . . Liquor
  - 410. . . . Others not elsewhere classified
- 42 . . . . Drug Stores
- 43 . . . . Eating and drinking establishments
  - 431. . . . Eating places without "drive-in" facilities
  - 432. . . . Eating places with "drive-in" facilities
  - 433. . . . Taverns and bars (places of drink, no food)
  - 434. . . . Ice cream estblishments
  - 435. . . . Roadside stands (all types)

45 . . . . Other general merchandise stores
454. . . . General merchandise and dry goods
455. . . . Others not elsewhere classified
46 . . . . Apparel and accessories stores
461. . . . Men's and boys' apparel and accessories
462. . . . Women's and girls' apparel and accessories
463. . . . Infants' and children's wear
464. . . . Family apparel
467. . . . Shoe
469. . . . Others not elsewhere classified
47 . . . . Furniture, home furnishing, and appliance stores
471. . . . Furniture
472. . . . Floor coverings (rug, linoleum, etc)
473. . . . Home furnishings (excluding electrical appliances)
474. . . . Electrical appliances, radio and TV
475. . . . Others not elsewhere classified---Sewing
48 . . . . Motor vehicle and vehicle accessories establishments (sales and service); boats and marine equipment establishments (sales and service); farm equipment establishments (sales and service)
481. . . . Automobile, motorcycle, and truck dealers, new and used
482. . . . Tire, battery, and accessories
483. . . . Household trailers--Sales and Service
486. . . . Farm equipment
487. . . . Others not elsewhere classified
49 . . . . Gasoline service stations
50 . . . . Lumber and building materials
501. . . . Paint, glass, and wallpaper
502. . . . Plumbing and heating (non-electrical) supplies
503. . . . Electric supplies
504. . . . Lumber
51 . . . . Hardware stores
52 . . . . Other retail outlets not elsewhere classified
524. . . . Gift, novelty, souvenirs
525. . . . Music

WHOLESALE AND STORAGE

53 . . . . Wholesalers with stocks
531. . . . Motor vehicles and equipment--Gt. Falls Auto Parts
534. . . . Groceries and related products
536. . . . Electrical goods, hardware, and supplies--plumbing
54 . . . . Wholesalers without stocks
544. . . . Groceries and related products
545. . . . Farm products, raw materials
55 . . . . Warehousing and storage (non-extensive yard use)
56 . . . . Other storage (extensive yard use)
561. . . . Lumber
57 . . . . Other wholesale or storage establishments not elsewhere classified

SERVICES

60 . . . . Personal services
601. . . . Barbershops
602. . . . Beauty shops
603. . . . Photographic studios, including commercial photography
605. . . . Laundries, including self-service
606. . . . Shoe repair and shoeshine shops
609. . . . Others not elsewhere classified

- 61 . . . . Business services
  - 611. . . . Advertising firms
  - 610. . . . Others not elsewhere classified.
- 63 . . . . Automobile repair and service
  - 631. . . . General repair shops (no sales outlet)
  - 635. . . . Automobile laundries
- 64 . . . . Miscellaneous repair and service
  - 648. . . . Others not elsewhere classified--Rent-alls
- 65 . . . . Financial, insurance, and real estate
  - 651. . . . Banks, including savings and building and loan associations
  - 652. . . . Credit agencies other than banks
  - 654. . . . Insurance brokerage or carrier companies
  - 656. . . . Real estate companies, including agents, brokers, and managers
- 66 . . . . Medical and health services
  - 661. . . . Physicians and surgeons' offices
  - 662. . . . Dentists and dental surgeon's offices
  - 663. . . . Radiologists' offices
  - 664. . . . Medical and dental laboratories
  - 665. . . . Optometrists' offices
  - 668. . . . Others not elsewhere classified--Vets
- 67 . . . . Other professional services
  - 672. . . . Legal offices
  - 673. . . . Engineering offices
  - 674. . . . Accounting offices
  - 675. . . . Others not elsewhere classified- Employment
- 68 . . . . Buildings or offices not elsewhere classified
  - 681. . . . Vacant

PUBLIC AND QUASI-PUBLIC BUILDINGS

- 70 . . . . Educational institutions
  - 703. . . . Junior colleges, colleges and universities
- 71 . . . . Hospitals
  - 711. . . . Private hospitals
- 74 . . . . Religious institutions
  - 741. . . . Churches, synagogues, and associated buildings
- 76 . . . . Organization, nonprofit
  - 761. . . . Civic, social, and fraternal
  - 764. . . . Unions
- 79 . . . . Government, administrative and legal
  - 793. . . . State offices
  - 794. . . . Federal offices
- 81 . . . . Indoor amusement and recreation
  - 815. . . . Bowling and billiards

PUBLIC AND QUASI-PUBLIC OPEN SPACE

- 83 . . . . Public parks and zoological gardens
  - 831. . . . Public parks
- 85 . . . . Outdoor amusement and recreation
  - 852. . . . Drive-in theaters
- 86 . . . . Race tracks and stadia
  - 861. . . . Race tracks

OTHER OPEN SPACE

- 90 . . . . Agriculture
  - 904. . . . General farms
- 93 . . . . Vacant land
  - 931. . . . Zoned residential
  - 932. . . . Zoned commercial
  - 933. . . . Zoned industrial
  - 934. . . . Zoned not elsewhere classified
  - 935. . . . Unzoned

Appendix 5

RELATION OF MOTOR VEHICLE REGISTRATION IN CASCADE COUNTY AND THE STATE OF MONTANA

A related aspect of highway improvements in a community is the number of motor vehicle registrations. The following table summarizes the motor vehicle registration (private cars and trucks) for Cascade County and the State of Montana from 1940-1964.

Motor Vehicle Registration a/		
Year	Cascade County b/	State of Montana c/
1940	14,278	196,000
1945	12,559	161,000
1950	20,715	265,000
1955	27,130	336,000
1960	35,906	381,000
1964	43,038	417,429

a/ Passenger cars and trucks; no trailers
b/ Cascade County Treasurer's Office
c/ Montana State Highway Commission, and Statistical Abstract of the United States

Inasmuch as motor vehicle registration figures are not recorded by cities, it is necessary to use data on a county basis. Since the vast majority of the population of Cascade County live in the City of Great Falls and its surrounding area, it is believed that the registration trends for Cascade County are representative of Great Falls.

From 1940 to 1964, while motor vehicle registration in Cascade County increased by 201%, the increase on a state-wide basis was only 113%. From 1950 to 1964, comparable increases are 108% for Cascade County and 58% for Montana. Even for the most recent period, 1960 to 1964, Cascade County experienced a 20% increase while the state only had a 10% growth.

Percent Increase in Motor Vehicle Registration		
Period	Cascade County	State of Montana
1940 to 1964	201%	113%
1950 to 1964	108%	58%
1960 to 1964	20%	10%

The substantially greater growth of motor vehicle registration in Cascade County in comparison to the State is reflected in the fact that in 1940, Cascade County had 7.3% of the motor vehicles registered in the state while in 1964 this relationship increased to 10.3%. Thus, it is evident from the facts on motor vehicle registration that Great Falls enjoyed a growth substantially greater than that of the State.

Appendix 6

BUSINESS ACTIVITY IN GREAT FALLS AND U. S. BUREAU OF CENSUS SURVEYS

Business activity in the Great Falls area can be summarized best by reference to the U. S. Bureau of the Census surveys. The 1963 Census of Business presents the data as they apply to Retail Trade, Wholesale Trade and Selected Services while the 1958 Census of Manufacture presents the information for this area.

Summary of Business Activity in the Great Falls Area

	Number of Establishments	(000's of $) Sales	Payroll	Paid Employees
Retail Trade	531	$119,238	$15,935	3,893[a]
Wholesale Trade[b]	160	142,303	6,805	1,227
Selected Services	362	12,991	4,384	1,117
Sub-total	1,053	$274,532	$27,124	6,237
Manufacturing[c]	55	---	13,169	2,786
Total	1,108	---	$40,293	9,023[d]

[a] In addition, there are 435 Active Proprietors of Unincorporated Businesses.

[b] Great Falls Standard Metropolitan Statistical Area (Coextensive with Cascade County).

[c] Cascade County from 1958 Census of Manufacture. Value added by Manufacture was $45,086,000.

[d] Total Non-agriculture Employment for December 1964, as reported by the Montana State Employment Service, for the Great Falls area (which covers Cascade County) was as follows:

Retail and Wholesale Trade	5,600
Government (Federal, State and Local)	4,100
Services and Miscellaneous	3,500
Manufacturing	3,000
Transportation and Utilities	2,100
Contract Construction	1,700
Finance, Insurance and Real Estate	1,300
Total	21,300

The above non-agricultural employment estimates include all full-time and part-time wage and salary workers who worked or received pay during the pay period ending nearest the 15th of December. Proprietors, firm members, personnel of the armed forces, domestic servants, and self-employed persons are excluded.

The more important retail trade activities are handled by:

	Number	(000's of $) Sales
Automotive Dealers	35	$27,783
Food Stores	79	26,310
General Merchandise Group Stores	19	15,926
Eating and Drinking Establishments	115	9,391
Lumber, Building Materials, Hardware, and Farm Equip. Dealers	24	7,869
Gasoline Service Stations	82	7,504
Other Miscellaneous Stores	177	24,455

The more important wholesale trade activities are handled by the following types of wholesaling operations:

	Number	(000's of $) Sales
Farm Products (raw materials)	20	$51,532
Groceries and Related Products	19	24,815
Machinery Eqt., Supplies	28	11,742
Motor Vehicle, Automotive Eqt.	20	8,399
Petroleum Bulk Stations, Terminals	18	6,811
Lumber, Construction Materials	9	5,218
Drugs, Chemicals and Allied Products	6	3,995
Hardware, Plumbing, Heating Eqt. & Supplies	5	3,176
Paper, Paper Products	5	2,513
Beer, Wine, Distilled Alcoholic Beverages	3	2,002
Electrical Goods	7	1,816
Other Miscellaneous Products	20	20,284

The Bureau of the Census has chosen some of the many services available in Great Falls for consideration. Included in their list of selected services are:

	Number	(000's of $) Sales
Personal Services	146	$3,229
Hotels, Motels, Tourist Courts, Camps	65	3,097
Misc. Bus. Services	58	2,658
Auto Repair, Auto Services, Garages	30	1,778
Amusement, Recreation Services (except MP)	14	981
Misc. Repair Services	45	667
Motion Pictures	4	581

In the manufacturing area, the 1958 Census of Manufacture presents the 55 establishments by size.

Number of Establishments	Employee Size
34	1 to 19 employees
15	20 to 99 employees
4	100 to 249 employees
2	250 employees and over

Appendix 7

THE HISTORY OF GREAT FALLS, MONTANA

A. Introduction

The United States of America has had an exciting and complete history. In little more than three hundred years, it evolved from an embryo of untouched forests and plains into a modern industrial colossus. But, in comparison with the other countries of the world, it is still an infant. Hence, the United States will remain the epitome of the nations of the world because it possesses room for continued growth, development, and change.

Certainly, America's greatest phenomena is that so much was done in such a short span of time. To mold a mighty nation in three centuries is quite a feat. Yet, this feat takes on even more prodigious proportions when one realizes that only one-third of those years were used to forge the West. From the mid-nineteenth century through the present, the term "The West" has meant "land of opportunity." Today, the West is a wealthy, well developed, and fully accepted part of the nation.

In the area of the Northwest which encompasses North Dakota, South Dakota, Wyoming, Montana and Idaho, only a relatively small number of cities has developed. Population-wise, the largest city in this area is Great Falls, Montana, with an estimated 1964 metropolitan census of 72,190. This industrial city in an excellent farming and livestock region lies on a large bend of the Missouri River in north-central Montana.

Great Falls logically derived its name from the five natural waterfalls Lewis and Clark discovered here and described in their journals. But, its origin was long before this famous discovery.

B. Early History

Geologists tell us that in the Pleistocene Epoch, the Keewatin ice sheet formed in the glacial field west of Hudson's Bay and crept southward for countless years. Finally, it reached what are now the northern and eastern city limits of Great Falls. It stopped there. At the edge of this ice sheet, a glacial lake seven hundred feet deep was formed. The lake which was about 130 miles long and 30 miles wide seemed to be centered over what is now the town of Great Falls. In order more fully to comprehend the immensity of this lake, one need only realize that if the lake were to return today, only the 506 foot stack of the Anaconda Company on its hill north of Great Falls would reach its surface. Fortunately, scientists assure us that there still remain thousands of years before another ice age appears.

As the ages passed, the lake dried up and the glacier receded. Just previous to this glacial age, the Missouri River flowed eastward through what is now Sand Coulee Creek, south of Great Falls. When the lake drew back, it filled the old southern channel of the Missouri with silt and drew the River northward with it. As the Missouri cut this new channel, it made the bend around which Great Falls has developed. With the further passage of ages, the River changed its course often, but the bend has remained.

Archeological findings have definitely proved that long before the Plains Indians even appeared, groups of people who later vanished from the earth were cognizant of Great Falls. The present site where the Great Northern Railroad Bridge crosses the Missouri was their favored ford on the "Great North Trail." This was the only good crossing for many miles in either direction.

During the following ages the Plains Indians used the Great Falls area for hunting, fighting, and fording.

With the coming of the whiteman to the new world, the Great Falls area was originally part of the territory claimed by France. Although France ceded the lands to Spain in 1762, she dubiously reclaimed their possession 40 years later. Napoleon, unable to wage his European war and control his claims in America at the same time decided to follow the advice of his famous minister, Tallyrand, and sell the territory. Hence, in 1803, the United States of America made probably the greatest real estate bargain in history; 828,000 square miles at approximately 3 cents an acre.

Successively, the lands of Great Falls have been part of the Territory of Louisiana, Territory of Nebraska, Territory of Dakota, Territory of Idaho, Territory of Montana, and the State of Montana, when statehood was achieved in 1889.

Anxious to learn about his new acquisition, President Jefferson appointed Captains Meriwether Lewis and William Clark to lead an exploratory expedition through the newly acquired lands.

Hence, in July of 1805, Lewis and Clark became the first whitemen to set down on record their discovery of Great Falls. After setting up camp somewhere along the River in the vicinity of the present city, these explorers took note of Giant Springs, the largest fresh water springs in the world, and the series of waterfalls along the River which they named Black Eagle, Rainbow, and Great Falls.

For forty-nine more years, the area remained off the beaten path. During these years, mountain men, gold-seekers, sheep and cattle ranchers, farmers and homesteaders were making their way through Montana to lands farther West. Fort Benton, the most western steamboat port of embarkation on the Missouri, drew most of these adventurers and enjoyed the "Hay-Day" of its existence. Although only forty miles upstream, Great Falls remained completely isolated and unsettled. But, soon, the westward push of the railroad would transform the barren land into a bustling frontier community.

Finally, Governor T. T. Stevens appeared in 1854 and made maps of the area. It seems that Stevens was very seriously considering Great Falls as a site on a northern railroad route from the Upper Mississippi Valley to the Pacific Ocean.

A short four years later, the famous John Mullan spent part of 1858 remapping the area. His primary concern was in connection with plans for a military road connecting Walla Walla with Fort Benton by way of Missoula, Deer Lodge and Helena. He made a survey through Great Falls and recommended the establishment of a military post where Great Falls now stands. But, the "Mullan Road" was eventually abandoned due to the difficulties of building through the Missouri River canyon.

Granville Stuart traveled through Montana just at the time it was declared a territory. His article, Montana As It Is, appeared in 1865 and is the earliest printed account of Montana after the territory was organized. In his journal of the North Eastern Basin, the term Great Falls appears. But, since the town was not conceived until 20 years later, Mr. Stuart in only referring to the waterfalls and not to what will later be a city.

In 1872, there appeared another explorer under contract. Thomas P. Roberts, employed by the Northern Pacific Railway Company, investigated the navigational possibilities on the Missouri at this location.

C. The Founding and Development of Great Falls

Paris Gibson is deservedly known as the "Father of Great Falls." This pioneer and envisionary had been born and educated in the state of Maine. Although elected to the lower house of the Maine Legislature and in possession of his father's successful farm, Paris Gibson realized that a young man's golden opportunity lay no longer East of the Appalachians, but farther West. Hence, in the late 1850's Gibson and his recent bride, Valeria, settled at St. Anthony's Falls, Minnesota---the present site of Minneapolis. Impressed by the potential water power of this town, Gibson immediately established a flour and woolen mill. Even at this early stage, Gibson reflected the ambitions and skills that he later employed in founding Great Falls. The March 19th, 1901 copy of the Minneapolis Times referred to him as follows:

> Mr. Gibson was one of the pioneers in the development of this city and his energy and enterprise contributed in no small degree to the prosperity it now enjoys. He has always been the friend of the city in whose early industrial and commercial growth he took so prominent a part.

The "panic of 1873" completely ruined his business ventures in Minnesota, so Gibson, now forty-nine years old, headed farther West for the second time in his life. In 1879, the man primarily responsible for the founding of Great Falls arrived in Fort Benton.

At first, Paris Gibson had been interested in sheep ranching, but his tremendous personal capabilities caused him to attempt more demanding situations. It was during his very first year in Montana that Gibson stopped at Fort Shaw for a few days, and saw a copy of Lewis and Clark's records and maps. Gibson tells us in his book, The Founding of Great Falls and Some of its Early Records, that he noted the Falls of the Missouri and decided to visit them.

All the records and histories of this era attest the far-sightedness and perseverance of Paris Gibson. In 1880, when he and his son, Theodore, visited the future sight of Great Falls for the first time, Montana was still strictly part and parcel of the old west! There was no railroad and the population was a scant 30,000. The vast majority of these people were adventurers and miners situated in "get-rich-quick" mining camps. They had no interest in setting roots in this unsettled land. Also, powerful and desperate Indian groups still controlled the northern part of the territory. The whiteman's only form of protection was the scattered and isolated forts garrisoned by United States' soldiers. It is true that even at this early date, cattlemen were pressing into these open lands. But, the buffalo and antelope were still numerous.

Gibson liked what he saw during his visit to Great Falls and from that first moment he became a man whose entire being was dedicated to a single purpose--the establishment of a city. The eagerness with which Gibson pursued his self-appointed task is seen in an account by Robert Leavens which appeared in the Great Falls Tribune on February 11, 1928.

> While traveling by boat to Fort Benton in 1881, among my fellow passengers was Paris Gibson. The enthusiasm with which he went over his ideas for the founding of Great Falls was infectious.

Immediately, Gibson realized that additional assistance would be needed in order to carry out his plans. This help came from James Jerome Hill, president of the St. Paul, Minneapolis, and Manitoba Railway which in 1890 became the Great Northern Railway Company. Hill, who was recognized as an empire builder and financial giant, backed up his firm belief in the possibilities of this unsettled country by putting his large resources and influence behind Gibson. This agreement was made late in 1882. At that time, Gibson made the difficult journey back to Minneapolis and met briefly with Hill. Within a few hours, Gibson and Hill had come to terms, and Gibson was again on a train headed back to Montana. Gibson readily attested to his partner's value when he said:

> Doubtless my ability to acquire a large tract of land in a solid body at the falls of the Missouri was due largely to Mr. Hill's prompt action at the time. . .

By means of "soldier's script," Gibson and a few of his friends acquired the lands of Great Falls. "Soldier's script" stemmed from the Civil War. Under its provision, veterans could secure additional homestead lands and were not required to live on them. Hence, it was a common practice of land speculators to buy up this script and gain possession of large tracts of land, mostly along railroads. Instantaneously, settlers began to arrive as the townsite surveys were completed. In the fall of 1884, Great Falls became a voting precinct of Choteau County. Also during that year Jim Hill visited the new town to look over the early results of his partnership transaction with Gibson. Since Hill was one of the first men to recognize the fact that coal would eventually displace wood for locomotive use, he was probably deeply impressed by the large coal fields at nearby Sand Coulee. In just three more short years, Hill's westwardly extending railroad would reach Great Falls.

1885 saw several small stores, a seventeen pupil school and residences spring up. Also, a stage coach came through the area every other day, and even a post office was set up in Johnstown directly across the river from Great Falls.

It should be quite obvious by now that the origin of Great Falls is unique in Montana history. A large number of the early Montana cities evolved haphazardly in the excitement of gold discoveries or as stopping places on the trail from one mining camp to another. Therefore, since these towns started as either a cluster of frame dwellings beside the trail or in the vicinity of the mines, their streets were mere paths with no consideration for the towns' future growth and development.

Conversely, the pre-planned city of Great Falls was blessed with wide, tree-covered streets arranged in logical fashion, numerous recreational parks, and a well situated railroad yard. Another unusual fact is that those who came in the town's infancy intended to make their homes here. Basically, the first residents were young, educated, and business-minded persons who shared with the city's founder a powerful faith in its future.

Growth continued and by 1887 Great Falls had become the county seat of the newly formed Cascade County. This movement on the part of the Great Falls residents aroused keen interest throughout the state. The bill to make Great Falls the county seat was presented at an extraordinary session of the legislature convened by Governor Leslie. Although residents from the Sun River region, business interests in Helena, and business groups in Fort Benton bitterly opposed the legislation--it was passed. With one feather already in its cap, Great Falls became incorporated as a second-class city on October 4, 1888. At this time, Paris Gibson was elected the first mayor.

By now, train service was reaching the figure of approximately 3000 or more citizens on a regular basis. Unfortunately, obtaining property in Great Falls took a great deal of hard cash because the price of property was unusually high. A visitor from Newburg, New York, was taken back by what he considered outrageous property costs in Great Falls. In his home town of 30,000, the most expensive lot overlooking the Hudson was worth only $300. In Great Falls with a population of 1,200, residential lots ran from $800-$1,000 and the downtown business lots were priced six times higher. But, things kept humming along. For example, the newspaper started in 1885, continued to find success. A silver-lead smelter, The Montana Smelting and Refining Company, was under construction at Giant Springs in 1888. Also, Mr. Thomas Couch, general manager of the Boston and Montana Consolidated Copper and Silver Mining Company, selected Great Falls in 1889 as the site for their new reduction works. The inducements which brought this industry were exactly the same ones that had caused Paris Gibson to found the town: abundance of water power and the proximity of the Belt and Sand Coulee coal mines. The very next year, construction of the smelting works was begun. Then, in March, the treatment of the companies' ores was started at the plant. (It should be pointed out that there was no connection between the Montana Smelting and Refining Company and the Boston and Montana Consolidated Copper and Silver Mining Company.) Between 1890 and 1893, the Bijou Music Hall, the Great Falls Iron Works, the Grand Opera House, the Boston and Montana Consolidated Copper and Wire Mining Co. and Royal Flour Mill all opened their doors.

A fairly accurate picture of this prosperous community can be seen on the frequently displayed 1891 Perspective Map of Great Falls. At this time the smelter had been partially built and there existed two bridges across the

Missouri. Most of the 4,000 residents in 1890 were located in the lower section of town. As one would expect, Central Avenue had developed into the dominating commercial district. Perhaps the most unusual sight to present day residents is that Tenth Avenue South is completely uninhabited and almost left off the map entirely. This present four-lane, highly commercialized highway will remain almost completely ignored and unbuilt for another fifty-odd years.

The community spirit and activities of Great Falls in the "Gay Nineties" were similar to those found in any western city. For example, the Minneshoska Boat Club held weekly races on the Missouri, the Northern Montana Fair Association had a race track on the west side of town, and prominent sporting clubs in tennis, cricket, baseball and bicycling had been formed.

The "Electric City" started to earn its present nickname when the Boston and Great Falls Electric Light and Power Company organized in 1890. They were the first to utilize the power at Black Eagle falls for lighting and street railway purposes.

In 1893, Great Falls met its first real crisis. The nation-wide panic of 1893 was slow in reaching Montana but when it arrived it was severly felt. Like most rapidly expanding western cities, Great Falls had not developed its resources on a self-sustaining basis and was almost entirely dependent on eastern capital. Silver prices dropped so rapidly that the mines had to shut down. Ranchers were equally affected because the wool and livestock market disappeared. With banks closing and people out of work, many businesses in town also closed their doors. In an effort to improve the economic condition Great Falls turned to its surrounding agricultural area. With the expressed purpose of developing the land resources of the surrounding country, an agricultural society was formed. Improvements in irrigation, strains of beef, and wheat planting were discussed and accomplished. An effort to obtain the state fair for Great Falls failed, but plans for the county fair went off without a hitch. Eventually, the panic passed, but many citizens from all classes and walks of life had been destroyed.

The hard times could not mortally damage the earlier success of the Boston and Montana Consolidated Copper and Silver Mining Company. From 1895 through 1900, nine hundred men were employed at the plant. They turned out over four million pounds of refined copper during this period.

Harnessing the readily accessible water power of the Missouri began in 1891. During that year, Black Eagle Dam was built and in operation the following year. In 1927, it was reconstructed. The Rainbow, Volta (Ryan), Morony, and Cochran Dams were finished respectively in 1910, 1916, 1930, and 1958. The sixteen mile stretch of the Missouri which encompasses all five dams has a drop of more than 500 feet. This potential water power mass has been harnessed by the five hydroelectric plants of the Montana Power Company which produce a total of 315,000 H. P. or 230,000 KW.

The Anaconda Copper Mining Company absorbed the Boston and Montana Consolidated Copper and Silver Mining Company in 1910. It was during these years that the Anaconda Copper Mining Company was building a smelter in Anaconda, Montana. Hence, they needed the Great Falls plant to refine the raw copper that came from the smelter. Numerous changes and additions to the plant's mining processes took place during these formative and prosperous years. For example, a "thaw shed" to handle numerous freight cars was built. The electrolytic copper refinery was enlarged, and a general laboratory was constructed. 1916 and 1917 saw a zinc plant, a copper wire mill, and a ferro-manganese plant constructed on the ever expanding "Smelter Hill." During the next twenty years, the plant continued to grow and entered new metal markets. The production of both cadmium and indium was started during these years. Finally, in 1953, the Anaconda Copper Mining Company ventured into the area of aluminum operations. A new aluminum rolling mill was built and doing business by 1955. With this addition, the firm decided to drop "copper" from its name thus making it read--Anaconda Company.

The pride which the residents of Great Falls felt for their city by 1919 was certainly legitimate. Great Falls possessed the only copper wire mill west of the Mississippi. Also, the largest packing plant between St. Paul and Spokane was in operation. There were 8 banks, 7 theaters, and 60 factories.

Although Great Falls remained the second largest city in Montana during the years 1920-1940, a plateau stage had been reached. During that twenty-year period, the population increased by only 5,000. Then between 1940 and 1950, the city increased by one-third its previous size. One decade later, a phenomenal 41% population gain was recorded. This made Great Falls one of the fastest growing cities in the country.

During these years of rapid growth, the city of Great Falls expanded in every direction. For example, according to records in the office of City Engineer C. R. Hanson as of December 31, 1959, the city's area increased by 46.5% from 1950-1960. Perhaps this tremendous rate of growth can be more easily seen by quickly reviewing the growth of Tenth Avenue South. Before 1934, Tenth Avenue South was not even classified as a road of the state highway system.

From the time it was classified as a road in 1934 until 1951 when the O. S. Warden Bridge was completed connecting the west side of Great Falls to the east shore across the Missouri River, Tenth Avenue South saw little traffic and only slight improvement. In the next few years, however, the avenue began to develop, and by 1956 a four-lane highway on Tenth Avenue South was completed. Today, Tenth Avenue South has become a highly commercialized area.

D. Contemporary Great Falls

This aspect of Great Falls is covered in this study in Chapter V--Brief Historical Background of Great Falls under part C.--Later Business Development. It is suggested that the reader turn to this chapter to complete The History of Great Falls, Montana.

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